Guardall

PX/QX/RX System

Version 4.30

Engineer Manual

Issue C

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Menus

This manual details all of the programming options. These are only available to the engineer. For details of user options that are also available to the engineer, refer to the user manual.

All user and engineer options are organised in a menu. A menu consists of a list of options, each with a number and a prompt. As an example when you enter a valid code, the display may look something like that shown below. For example:

```
02=Set
05=Eng
```

An LCD keypad can display one menu item on each line. If all options in a menu cannot be displayed on the keypad, then there will be an arrow symbol at the end of line 2 to indicate that more options are available. To view more options use the ↑ ↓ or ✔ buttons.

If you already know the option number you require this can be entered directly without the prompt being displayed. The available menu options are dependent on the control panel variant and the user authority as shown in the table.

The table on the following page (page 12) shows the menu options available for each User (including the Engineer), and the notes below apply to certain items within the table.

Notes:

1. The Engineer option is not available to a user if the panel is programmed to allow the engineer to log on without user authorisation.
2. The PIN option is not available if the PIN of Day option is enabled. The PIN option for some users will only be available if configured as part of the user authority.
3. The time can only be changed by a master/ordinary user if programmed by the engineer (System/clock edit option). User time changes are limited to +/- 75 minutes.
4. The bypass option is only available if at least one circuit has been programmed to allow bypass.
5. The print options are only available of a printer is connected to the system.
6. The access options are only available if an ACM is fitted to the system.
7. The schedule option is only available if programmed by the engineer. From v3.2 the Schedule Edit option also applies to the holiday option.
8. These options are only available if the Master edit option is on.
9. The user name, authority and schedule sub-menu options are only available if the Master edit option is on.
10. A Guard type user can view/print the event log when set.

Code	Menu Option	Engineer	Master	Ordinary	Set/Uns	Set	Unset	Cleaner	Duress	ATM	Log	Bank Reset	Guard
01	Unset	✓	✓	✓	✓	✗	✓	✓	✓	✓	✗	✗	✗
02	Set	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✗	✗
03	Reset	✓	✓	✓	✓	✗	✗	✗	✓	✗	✗	✓	✗
04	Test	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
05	Engineer	✓	1	1	1	1	✗	✗	✗	✗	✗	✗	✗
06	PIN	2	✓	2	2	2	✗	✗	2	✗	✗	✗	✗
07	User	✗	9	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
08	Tel Number	✗	8	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
10	Log-Full	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
11	Log-Cct	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
12	Log-User	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
13	Log-KP	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
14	Log-Date	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
15	Log-Alarm	✓	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
16	A/Log-Full	6	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗
17	A/Log-User	6	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗
18	A/Log-ACM	6	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗
20	Time	✓	3	3	✗	✗	✗	✗	✗	✗	✗	✗	✗
21	Date	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
22	Sum. Time	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
23	Win. Time	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
24	Holiday	✗	7	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
25	Schedule	✗	7	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
26	Group Text	✗	8	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
27	Minutes Left	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
28	Late Work	✗	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
30	Bypass	4	4	4	✗	✗	✗	✗	✗	✗	✗	✓	✗
32	Chime	✓	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
33	Shunt	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
40	Print Text	5	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
42	Print Hols.	5	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
43	Print Full	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
44	Print Changes	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
45	Print Diags	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
50	Add A/User	6	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
51	Delete Users	6	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
52	Identify User	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
53	Door Unlock	6	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
54	Door Lockout	6	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
55	ACM Text	✗	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
60	Check	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
65	PSU Voltage	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
66	Bat.Current	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
67	Sys.Current	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
68	Bat.Standby	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
69	5V Reference	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
70	Copy Cct	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
71	Copy User	✓	8	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
72	Copy KP	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
73	Copy A/User	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
80	Demo Mode	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
81	Active Cct	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
82	Soak Cct	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
83	Soak Duration	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
84	Soak Limit	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
85	Soak Flt.Disp	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
86	Isolate	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
88	Tam. Disable	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
89	Cct Status	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
90	KP HighVolume	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
91	KP LowVolume	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
94	Decommission	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
95	Commission	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
96	Send Config	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
97	Get Config	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
98	Basic Edit	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
99	Full Edit	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

Engineer Logging On and Off *Code-05*

The default engineer PIN code is 9999. When the panel is powered up an engineer can log on directly and has up to 8 hours working time on the system. At all other times the engineer can only log on after a user code is entered and the Eng option is selected. The panel can, however, be programmed to allow an engineer log on without first entering a user code. Once logged onto the system an engineer can log on and off any keypad during his working time. To log off the system completely select the Eng option from the main menu. The engineer log on and log off times are stored in the event log. The panel can be programmed to operate with a PC running GuardStation Remote™ software. All operations are programmable (Refer to **GSR section** for full details.). Remote access can either be automatic where the PC user can log on to the panel at any time without a user being on site, or can be programmed for on site user authorisation (User Enable). If User Enable is programmed then the user must select the Eng option before the remote user can log onto the system. When remote engineer log on is authorised the keypad will display the "**Out of Service**" message. The host must connect to the panel within 2 minutes. If any key is pressed during the out of service time the keypad will be put back on line. It is not possible to log off the system if there are alarms present.

PIN of Day

The PIN of the day option can only be enabled/disabled from GuardStation Remote™ version 2.5 or higher if Pin of the day is off in the panel defaults. When PIN of the day is active (key not zero) the engineer PIN code will be changed every day at midnight. The sequence of PIN codes generated will depend on the programmed seed code. The PIN code for each day can only be obtained by programming the 4-digit seed number into the PIN of the day PC program. If the PIN of the day option is on when power is first applied the panel will set the date to Monday 7th September 1992 and the engineer PIN code will be set to the default PIN for that day.

Time *Code-20*

The clock can only be set by the engineer. Some users have the authority to change the time by up to 75 minutes from the time set by the engineer if the user clock edit option is programmed. The old and new times will be recorded in the event log.

Time **12:00**	*To change, start entering the new time*
Time **Enter HH:MM**	*Enter the new time*

Date *Code-21*

Date **Sat 02 Jan 1999**	*To change, start entering the new date*
Date **Enter DDMMYYYY**	*Enter the new date*

The new date will be recorded in the event log.

Sum.Time *Code-22*

The panel may be configured to automatically change the time at the start and end of BST. The summer and winter time change dates may also be programmed manually. If you do not want the panel to automatically change the clock then enter the same date for the summer time and winter time. No year is entered as part of the summer/winter time change dates. The entered date will remain valid until changed. If you are entering a date for next year, which is before the current date, then the displayed day of the week will be incorrect. This can be ignored, as the correct date will be used.

Sum.Time **Sat 10 Apr**	*To change, start entering the new date*
Date **Enter DDMM**	*Enter the new date*

Win.Time *Code-23*

Win.Time **Sat 10 Apr**	*To change, start entering the new date*
Date **Enter DDMM**	*Enter the new date*

Bypass, Isolate & Shunt

The panel will ignore circuits if they are bypassed, isolated or shunted.

Terminology	Definition
Bypass	The alarm loop of a bypassed circuit will be ignored for 1 set period only.
Temp Bypass	The alarm loop of a temp bypassed circuit will be ignored until the circuit's state clears.
Isolate	The alarm and tamper condition of an isolated circuit will be ignored until the isolate is removed.
Shunt	The alarm loop of a shunted circuit will be ignored until the shunt is removed.

The following programming options are associated with bypass, isolate and shunt:

Programming Menu	Option Name	Description
Circuit	Bypass	A circuit can be bypassed
	Shunt	A circuit can to be shunted
Output	Bypass	A circuit(s) in the programmed area(s) is bypassed
	Shunt Fault	A shunted circuit(s) is active when the shunt was removed.
System Options	Man Isolate	Allow a master to access the isolate menus
	Temp Bypass	Allow circuits to be temporarily bypassed.
	Byp Limit	The maximum number of circuits that can be bypassed at any one time (PX250HS).
	Isol. Limit	The maximum number of circuits that can be isolated at any one time (PX250HS).
	Shunt Limit	The maximum number of circuits that can be shunted at any one time (PX250HS).
	Force Set	Offer the user the force set option when a fault occurs when setting.
GSR	Bypass	Allow remote bypass from GuardStation™

All bypass, isolate and shunt operations are logged.

Bypass *Code-30*

A circuit can be programmed as bypassable. Not all users have the authority to bypass. The panel may also be configured for bypass from a PC using GuardStation™ software. All bypassed circuits are displayed when setting. The bypass will be automatically removed when the area containing the circuit is unset unless, the circuit has a 24-hour response and is still in fault.

Isolate *Code-86*

The engineer can isolate any circuit and some types of device.

Check Mode	Options
1=Isolate Cct **2=Isolate Conc** **3=Isolate Radio** **4=Isolate Keypad** **5=Isol Sndr.**	

The isolate options will be available to a manager user if the manager isolate (see system options) is programmed by the engineer.

Isolate Cct *Code-1*

The engineer can isolate any circuit. When a circuit is isolated the alarm and tamper responses are ignored. An isolated circuit will remain isolated until put back on line. A circuit isolate can only be removed if the circuit is clear. Isolated circuits are displayed when a user sets the circuit(s) area.

In the PX250HS each circuit must be individually configured to allow isolate and an isolate limit also applies.

Isolate Conc *Code-2*

A concentrator tamper response can also be isolated. An isolated concentrator will remain isolated until put back on line. This does not isolate the individual circuits on a concentrator. A concentrator isolate can only be removed if the concentrator tamper is clear.

Isolate Radio *Code-3*

A radio module tamper response can also be isolated. An isolated radio module will remain isolated until put back on line. A radio module isolate can only be removed if the radio module tamper is clear.

Isolate Keypad *Code-4*

A keypad tamper response can also be isolated. An isolated keypad will remain isolated until put back on line. A keypad isolate can only be removed if the keypad tamper is clear.

Isol Sndr. *Code-5*

The sounder tamper response can also be isolated. An isolated sounder will remain isolated until put back on line. A sounder isolate can only be removed if the sounder tamper is clear.

Printing

A serial printer may be connected to the XiB Serial Module (Refer to the installation manual for the required XiB Serial Module DIL switch settings). The print menu options will only be available if a Serial Module is connected and configured within the '13=Comms Modules' menu.

The printer format is selectable for 1200, 9600, 38400 or 115200. The format is no parity, 8 data bits and 1 stop bit. Press ✘ to stop printing at any time.

Print Text *Code-40*

The print text option will print all text descriptors for users, circuits, set groups, and the company name. Users and circuits that are off will not be printed.

Print Hols *Code-42*

The print holiday option will print all holiday periods.

Print Full *Code-43*

The print full option will print all configuration except the text descriptors. Users, outputs and circuits that are off will not be printed.

Print Changes *Code-44*

If you need a record of all programming changes then select print changes before entering edit mode. When print changes is selected the panel will print the changes in real time in the form:

Changes on *Date Time*
Area 1 Sounder Duration was 10 now 20

Print changes will not operate if the engineer copies a configuration. The print changes option will be automatically turned off when the engineer logs off or if power is removed from the panel.

Print Diag. *Code-45*

Only data for installed concentrators and configured circuits will be printed. The printed discharge current and the battery voltage will be the results of the most recent battery test. If the battery has never been tested this data will not be valid. All other printed diagnostic data will be "real time" data. For accurate readings, the 5V reference should be correctly set (code 69) prior to printing the diagnostic data.

Check *Code-60*

Check Mode	Options
01=Concentrator **02=Circuit** **03=Keypad** **04=Inputs** **05=Battery Test** **06=ACM** **07=SM** **09=Dialler** **10=RM** **11=OPM** **12=Audio Module**	

Concentrator *Code-01*

When the check concentrator option is selected the panel will display the status of all configured concentrators.

Conc-1 Clear **0.020A @ 12.100V**	*Fault, Tamper or Clear* *Conc supply current and voltage.*

The ↑ or ↓ buttons can be used to change the concentrator number. On a PX500 or PX250HS press the help key to display the concentrator bus number. The concentrator firmware version number will be displayed on all panel variants.

Conc n **BUSn V1.07**	*The conc descriptor* *The concentrator is replying on BUS n. The firmware is v1.07*

If the panel supports auxiliary PSU diagnostics, press the help key to display the concentrator auxiliary PSU battery charge current and battery voltage.

Conc-1 Aux PSU **0.060A @ 13.500V**	*Conc aux. PSU battery charge current and battery voltage.*

Note: The Aux PSU battery data will only be valid following a battery test (option 64). If the Aux PSU mains supply has failed then the battery data will be replaced by a fault message.

Conc-1 Aux PSU **230V Fault**	*The Aux PSU mains has failed.*

If during a mains fail the battery voltage falls below the battery low threshold then the Battery Low message will be displayed. Aux PSU 230V fault and Battery Low are logged in the event log. If no auxiliary PSU is connected a warning message will be displayed.

Conc-1 Aux PSU **Not Applicable**	*No Aux PSU is connected to the concentrator*

Circuit	***Code-02***

The ↑ or ↓ buttons can always be used to change the circuit number.
When a circuit alarms in check mode, all keypad bleepers will be activated until the circuit clears.
The circuit state depends on how the circuit is configured as well as the loop resistance, for example a 'Final Exit' circuit with a loop resistance of 8k (with Guardall 1 EOL configured, see &&&&) will result in the state being 'Door Open'. If the same circuit was reconfigured as 'Alarm' type the message would change to 'Alarm'.

The first screen of information, 'circuit resistance':

Cct-xxx Door Open **8.000k**	*The appropriate message for the state the of the circuit* *Circuit loop resistance*

If a circuit is mapped to a transmitter, the transmitter ID code will be displayed when the transmitter is activated.

Cct-xxx Fire **ID1-ID2-ID3-ID4**	*The appropriate message for the state of the circuit* *The ID code of the transmitter mapped to the selected circuit*

If the circuit is mapped to an XiB Detector then the XiB Detector voltage will be displayed in place of the circuit resistance.

Cct-xxx Clear **13.500V**	*The appropriate message for the state of the circuit* *XiB Detector voltage*

Press the **?** button to display the next screen of information, 'circuit description':

Cct-xxx Shunt On **PIR in Hall**	*The appropriate message for the state of the circuit* *The circuit description*

Press the **?** button to display the next screen of information, 'circuit location':

Cct-xxx Clear **Panel IP1**	*The appropriate message for the state of the circuit* *The circuit location (panel, circuit or keypad)*

If a circuit is mapped to a transmitter, the transmitter signal strength will be displayed when the transmitter is activated, along with the number of the receiver that data came via.

Cct-xxx Clear **■■■■, RM xx**	*The appropriate message for the state of the circuit* *The transmitter signal (4 blocks represents a good signal strength), RM number*

If a circuit is mapped to an XIB Detector, mapped detector number and detector type will be displayed.

Cct-xxx Clear **Det-x DT15AM**	*The appropriate message for the state of the circuit* *Detector the cct is mapped to and the detector type.*

Press the **?** button to display the next screen of information, 'circuit type':

Cct-xxx Alarm **"Alarm"**	*The appropriate message for the state of the circuit* *The circuit type, displayed in quotes to avoid confusion with circuit state*

If a circuit is mapped to a XiB Detector additional detector information can be seen.

PIR-alm UW-alm AM-cal	*In-depth error reporting (XiB detector only.)*

There are nine possible messages reported back from the XiB detector. A maximum of four can be displayed at any one time. These include:

1. Clear - Detector is clear (no other message 2-9 will apprear)
2. PIR-alm - PIR alarm
3. UW-alm - UW alarm
4. AM-cct - Anti-mask circuit fail
5. PIR-flt - PIR fault
6. UW-flt - UW fault
7. AM-cal - Anti-mask calibration fail
8. PIR-msk - PIR mask
9. UW-msk - UW mask

These 'additional information' messages will overwrite the normal 'circuit type' information. If there are no 'additional information' messages to display the normal 'circuit type' information will be displayed.

(Press the **?** button to display the first screen of information again).

Keypad	***Code-03***

The panel can display the status of keypads.

Keypad-1 Clear	*Fault, Tamper or Clear*

Press**?** to display the keypad bus number and text.

Keypad-1 BUS1 V2.00	*The keypad is replying on BUS n. The firmware is v2.00*

The ↑ or ↓ buttons can be used to change the keypad number.

Inputs	***Code-04***

The panel will report the status of the telephone line, comm fail, the mains supply, battery voltage and case/bell tamper. If all inputs are normal the message "**All OK**" will be displayed.

Battery Test	***Code-05***

The panel starts tests of all the batteries on the system. It goes through three screens.

Battery Test Please Wait...

After a second or so the display changes to:

Battery Test xx.xxxV	*Note: if you hit 'X' during this phase the test will be cancelled. Displaying the panel battery voltage **live**, may drop slightly during the test*

After another fifteen seconds the test is over and the final screen is displayed. The first of any problem battery tests will be shown on the top line. Note that if there was more than one battery that failed the test then this will be shown in the log.

Conc x Fault xx.xxxV	*The battery on conc x has failed the test* *Always displays the final **panel** battery voltage*

ACM	*Code-06*

When the check ACM option is selected the panel will display the status of all configured ACMs.

ACM-1 Clear **0.020A @ 12.100V**	*Fault, Tamper or Clear* *ACM supply current and voltage.*

The ↑ or ↓ buttons can be used to change the ACM number. On a PX500 or PX250HS press the help key to display the ACM bus number. The ACM firmware version number will be displayed on all panel variants.

ACM n **BUSn V1.03**	*The ACM descriptor* *The ACM is replying on BUS n. The firmware is v1.03*

Press **?** to display the ACM auxiliary PSU battery charge current and battery voltage.

ACM-1 Aux PSU **0.060A @ 13.500V**	*ACM aux. PSU battery charge current and battery voltage.*

Note: The Aux PSU battery data will only be valid following a battery test (option 64). If the Aux PSU mains supply has failed then the battery data will be replaced by a fault message.

ACM-1 Aux PSU **230V Fault**	*The Aux PSU mains has failed.*

If during a mains fail the battery voltage falls below the battery low threshold then the Battery Low message will be displayed. Aux PSU 230V fault and Battery Low are logged in the event log. If no auxiliary PSU is connected a warning message will be displayed.

ACM-1 Aux PSU **Not Applicable**	*No Aux PSU is connected to the ACM*

SM	*Code-07*

When the check SM option is selected the panel will display the status of all configured serial modules.

SM 1 Clear **Not Applicable**	*Fault, Tamper or Clear*

The ↑ or ↓ buttons can be used to change the SM number. On a PX500 pr PX250HS press the **?** button to display the SM bus number. The SM firmware version number will be displayed on all panel variants.

Serial **BUSn V1.05**	*The programmed SM comms type.* *The SM is replying on BUS n. The firmware is v1.05*

Press the **?** button again to display the comms status.

SM 1 Comms **Serial Busy**	*The RS232 port is busy on this serial module.*

Dialler	***Code-09***

When the check Dialler option is selected the panel will display the status of all configured dialler modules.

Dialler Clear **xx.xxxV ■■■■**	*Fault, Tamper or Clear* *The XIB supply voltage and GSM signal. 4 blocks represents a good signal.*

On a PX500 or PX250HS press the **?** button to display the dialler bus number. The dialler firmware version number will be displayed on all panel variants.

GSM **BUSn V4.50 9600**	*The dialler type: **not** read from the module, comes from panel config.* *The dialler is replying on BUS n The firmware is v4.50 XIB at 9600 baud*

Press the **?** button again to display the dialler capabilities.

PSTN GSM **GSM Clear**	*The dialler can do both PSTN and GSM calls* *The GSM connection is OK*

RM	***Code-10***

When the check RM option is selected the panel will display the status of all configured radio modules.

RM 1 Clear **Not Applicable**	*Fault, Tamper or Clear*

The ↑ or ↓ buttons can be used to change the RM number. On a PX500HS press the **?** button to display the RM bus number. The RM firmware version number will be displayed on all panel variants.

Radio 1 **BUSn V2.05**	*The RM descriptor.* *The RM is replying on BUS n. The firmware is v2.05*

Press the **?** button again to display the system configuration.

RM 1 Visonic **Not Applicable**	*The system is configured for Visonic radio*

OPM	***Code-11***

When the check OPM option is selected the panel will display the status of all configured output modules.

OPM 1 Clear **Not Applicable**	*Fault, Tamper or Clear*

The ↑ or ↓ buttons can be used to change the OPM number. On a PX500 or PX250HS press the **?** button to display the RM bus number.

Audio Module	***Code-12***

When the check AM option is selected the panel will display the status of all configured audio modules.

AM 1 Clear **Not Applicable**	*Fault, Tamper or Clear*

The ↑ or ↓ buttons can be used to change the AM number. Press the **?** button to display more audio module information.

LS **BUSn V1.00**	*A speaker is fitted (line will be blank for a microphone module)* *The AM is replying on BUS n. The firmware is v1.00*

Press the **?** button to display more audio module information.

AM 1 Clear **Listen**	*Fault, Tamper or Clear* *Listen/Talk/Off*

XIB Bus	*Code-13*

When the XIB Bus option is selected the panel will display additional bus diagnostic information on the peripheral devices on the bus. The ↑ or ↓ buttons can be used to change the XIB Bus number (on panel with more than one XIB Bus.)

When a count is incremented the descriptor for the device responsible for the increment is appended to the count.

XIB Bus 1:9.6 **RX341:KP 2**	*The bus number, bitrate on that bus in kilobits per second.* *Count of slave device with "no reply", this example shows that there have been 341 failures to reply on XIB Bus 1, the most recent was a poll of keypad 2.*

Press the **?** button to display the count of polls on this XIB bus.

XIB Bus 1:9.6 **>>51:Conc 1**	*The bus number, bitrate on that bus in kilobits per second.* *Poll count and device, this example shows that there have been 51 polls on XIB Bus 1, the most recent was a poll of concentrator 1.*

Press the **?** button to display the count of panel requesting retransmit.

XIB Bus 1:9.6 **MR0**	*The bus number, bitrate on that bus in kilobits per second.* *Count of panel requesting retransmit, this example shows that the panel has not requested a retransmit from any slave device on XIB Bus 1.*

Press the **?** button to display the count of slave requesting retransmit.

XIB Bus 1:9.6 **SR0**	*The bus number, bitrate on that bus in kilobits per second.* *Count of slave requesting retransmit , this example shows that no slave device on XIB Bus 1 has requested a retransmit from the panel.*

Press the **?** button to cycle back to first diagnostic message.

Note: When the menu is exited, or (where applicable) the XIB Bus number being checked is changed, the counts are all zeroed.

PSU Voltage	*Code-65*

PSU Voltage **13.700V**	*If PSU voltage is selected the power supply voltage measurement will be displayed.*

Bat. Current	*Code-66*

Bat. Current **0.100A**	*The battery charge current will be displayed.*

Sys. Current	*Code-67*

The system current includes all current taken from the PSU **including** the battery charge current.

Sys.Current **1.000A**	*The system current will be displayed.*

Bat.Standby	*Code-68*

The estimated battery standby time can be displayed. The battery standby calculation is based on the programmed battery size (Refer to Edit/Battery) and the measured system current. It is assumed that the battery is fully charged and has not lost any of its theoretical capacity.

Bat.Standby **24 Hours**	*The estimated battery standby time, rounded down to the nearest hour, will be displayed.*

5V Reference *Code-69*

The accuracy of the diagnostic measurements is in part dependent on the system 5 volt reference. To improve this accuracy it is recommended that the 5-volt terminal is measured using a calibrated voltmeter. The measured voltage, in millivolts should then be programmed:

5V Reference **5000**	*Enter the voltage in mV*

The allowed range is 4750-5250 (5 volts +/- 5%).

Copy Cct *Code-70*

To copy a circuit configuration to a range of other circuits:

Copy Cct __ **to __ - __**	*Enter the circuit to be copied* *and the copy range*

To copy a single circuit, enter the same circuit number as the first and last. The copy circuit option does not copy the circuit text descriptor.

Copy User *Code-71*

To copy a user configuration to a range of other users:

Copy User __ **to __ - __**	*Enter the user to be copied* *and the copy range*

To copy a single user, enter the same user number as the first and last. The copy user option does not copy the user text descriptor. If using a PX500 or PX250HS this option does not copy the user ACM authorities (See Copy A/User).

Copy KP *Code-72*

To copy a keypad configuration to a range of other keypads:

Copy KP_ **to _-**	*Enter the keypad to be copied* *And the copy range*

To copy a single keypad, enter the same keypad number as the first and last.

Copy A/User (PX500/PX250HS) *Code-73*

This option will only be available if at least one ACM is fitted to the system. To copy a user access configuration to a range of other users:

Copy A/User __ **to __ - __**	*Enter the user to be copied* *And the copy range*

To copy a single user, enter the same user number as the first and last. The copy access user option does not copy the user text descriptor. This is an end user only feature.

Demo Mode *Code-80*

When the system has been programmed it can be demonstrated to the customer using demo mode. In demo mode, movement detectors (programmed as alarm types) are ignored. This allows an area or the system to be set by the normal exit route while the site is occupied.

Demo Mode	Options
Demo Mode **Off**	*On/Off*

SetGroup-00	*0-max set groups*

When the panel is in demo mode the message "**Demo Mode On**" will be displayed on all keypads when no user is logged on. This message will only be cleared when the engineer switches off demo mode or if the engineer is logged off automatically at the end of the engineer working period. When the entry alarm sequence is demonstrated there will be no communicator activation.

Active Cct *Code-81*

Any circuit can be tested through to the monitoring station using the active test mode. Only one circuit can be active tested at any one time. A circuit which is alarmed during the active test will give a full alarm response including activating the communicator. Circuits that are tested in active test mode will require to be reset in the normal way. Alarm verification may be tested by doing an active test on 2 verifiable circuits.

Soak Cct *Code-82*

Circuits can be put on soak for a programmable period. When a circuit is on soak there will be no audible alarm response. The soak response for each circuit and the number of allowed activations during the soak period from each circuit are programmable. Soak circuit numbers are displayed when setting the area that contains the circuit.

Soak Duration *Code-83*

Soak Duration-00	*0-14 days*

At the end of the soak test duration the panel will record a soak test fail if a circuit has alarmed during the test period. The circuit is also returned to its normal response but will still be ignored until an engineer logs onto the system.

Soak Limit *Code-84*

Soak Limit-1	*1-9*

The panel records the number of times a circuit alarms during the soak period. If a circuit reaches the programmed limit during the soak test period it will be logged as a soak test failure and no further activations will be logged. The soak limit is not the same as the normal multiple alarm limit. Although soak alarms are always silent the sounder time still applies and if a circuit alarms more than once during the sounder period this will only be recorded as one activation.

Soak Flt.Disp *Code-85*

Soak Flt.Disp Off	*On/Off*

If the soak fault display option is on then, when a user logs on, circuits that have failed soak test fail will be displayed followed by the call engineer prompt.

Tam.Disable *Code-88*

The tamper disable option disables all sources of tamper. The engineer may not log off if tamper disable is on. However, if the engineer is logged off automatically at the end of the engineer working time then the tamper responses will be enabled. Please note that all audible responses are disabled while in engineer mode.

Cct Status *Code-89*

When the cct status option is selected all bypassed, isolated, shunted and soak test circuits will be displayed.

KP HighVolume *Code-90*

The high volume setting is used for alarm tones and is defaulted to the maximum (100).

KP HighVolume 100	*Enter a value in the range 1-100*

The volume setting is sent only to the keypad being used.

KP LowVolume *Code-91*

The low volume setting is used for entry/exit and fault tones and is defaulted to the half the maximum (50).

KP LowVolume 50	*Enter a value in the range 1-100*

The volume setting is sent only to the keypad being used.

Decommission (PX250HS) *Code-94*

This option will only be displayed if the panel is programmed for HS encryption and at least one GSR is commissioned. A panel can only be decommissioned by GSR after the on site engineer has selected the decommission option.

Commission (PX250HS) *Code-95*

This option will only be displayed if the panel is programmed for HS encryption and at least one GSR is not commissioned. A panel can only be commissioned by GSR after the on site engineer has selected the commission option.

Send Config ***Code-96***

If this option is selected PX will send the panel configuration to GSR. The GSR must be in the alarm monitor mode and there must be an entry with the panel ID in the GSR customer database. The configuration upload may take several minutes. If the x button is pressed during this time the GSR connection will be terminated and the GSR will not save the configuration. This feature is only supported from GSR version 2.5 and PX version 1.2 or higher.

Get Config ***Code-97***

If this option is selected PX will get the panel configuration from GSR. The GSR must be in the alarm monitor mode and there must be an entry with the panel ID in the GSR customer database. The configuration download may take several minutes. If the x button is pressed during this time the GSR connection will be terminated and PX will save the configuration data that has been received up until the link is terminated. This feature is only supported from GSR version 2.5 and PX version 1.2 or higher.

Basic Edit ***Code-98***

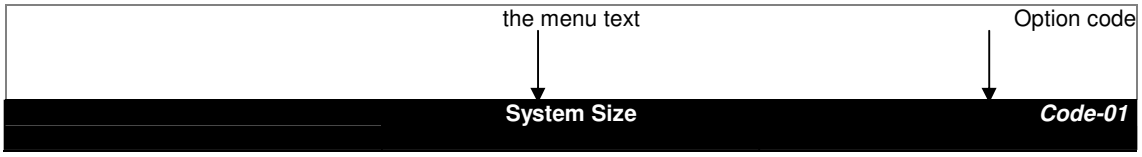
If the basic menu option is selected a limited number of menu options will be displayed. This makes programming quicker and simpler, as the more complex menus and attributes are 'hidden'.

Full Edit ***Code-99***

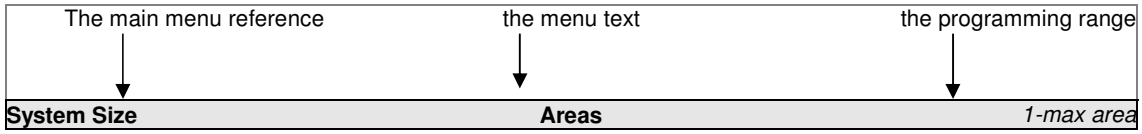
This option allows the engineer full access to all panel programming options.

Menu Sections

Each section of this manual starts with either a main menu section header or a sub-menu section header. A main menu section has a black title and shows the menu text and the code to access the option. For example:



The option code can only be used if any main menu item is currently on display. A sub-menu section header shows the menu text, the programming options and the main menu reference. For example:



Editor Overview

When you select a configuration item, data is entered in one of 4 ways.

- as a number
- from a help list
- as an 'off/on' choice
- a text descriptor

Editor Overview — Entering Numbers

Configuration items such as circuit programming require a number to be entered. The panel will prompt for a number indicating the number of digits to be entered by displaying "_" characters.

Circuit Number-_ _	*A 2 digit number is required*

Range checking is done when a number is entered. If a range error is detected, then the programming limits will be displayed.

Out of Range Limit=1 to 16

When the display returns to the selected option, simply enter a value within the specified range.

Editor Overview — Help List

Configuration items such as circuit type require a type to be entered.
This can be entered directly as a number or, if the **?** button is pressed, a list of available options will be displayed.

Editor Overview — Off/On Options

Some programming items are simple off/on options. You can either enter "0" for off or "1" for on, or if you press **?** the off/on options will be displayed.

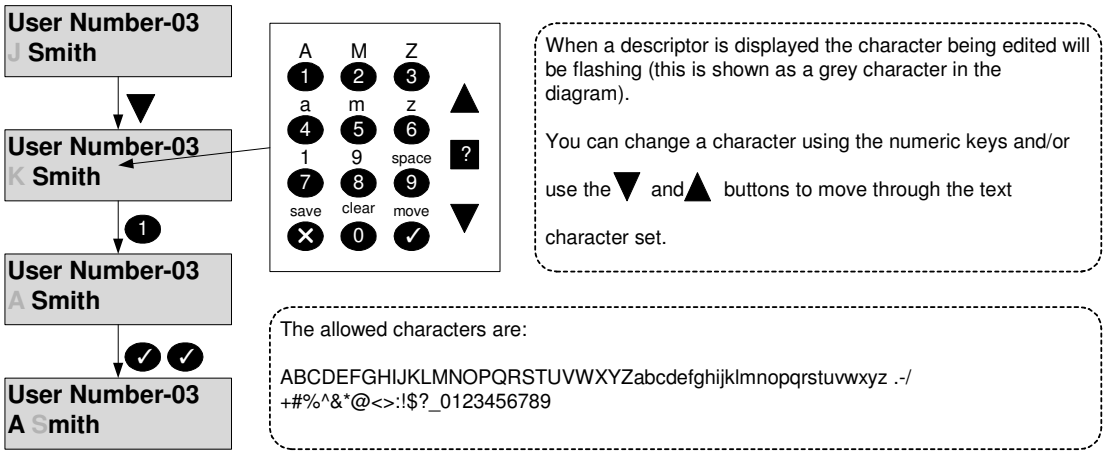
0=Off 1=On	*the help display for an on/off programming field*

Editor Overview	Text Descriptions

The panel can be programmed with text descriptors for circuits, users, set groups, concentrators, ACMs, radio modules, video servers (user id / password), custom users and the company name.

Descriptor	Default	Auth. Required	Where Used
Company Name	Guardall	Engineer only	Keypad bottom line when no user logged on
Users	User nn	Eng/Man	Event log, Programming Authority and codes, setting (with keyholders)
Circuits	Cct nn	Eng	Event log, Programming ccts, Active testing, Bypassing, Check mode, multiple alarm warnings, setting warnings, testing (untested ccts)
Set groups	Group n	Eng/Man	Event log, menus (set etc.), programming users.
Concentrators	Conc n	Eng	Check mode
ACM	ACM n	Eng/Man	Access log, check mode, menus
Radio modules	RM n	Eng	Event log, check mode.
Video server user id	guest	Eng	Programming video server.
Video server user password	guest	Eng	Programming video server.
Custom users	C.User n	Eng	Event log, Programming Authority and codes, setting (with keyholders)

The text descriptors can be up to 16 characters long for circuits and the company name and up to 10 characters for all other descriptors. An authorised user can change the text descriptors for a user, set groups and ACMs.



All changes to descriptors are logged.

Edit

Code-98/99

The main edit options are organised in a single page menu. To select an option, enter the menu item 2-digit code. This code can be entered while at the main menu level even if the menu item is not currently on display. The menu items can be scrolled by using the up and down buttons. The ✔ button can be used to move quickly through the menus. The order of menu items in version 4 are different from earlier versions. Some options are not available in all variants. Refer to the appropriate section for details.

Version 4 Main menu	
Menu	**Menu Text**
00	Defaults
01	System Size
02	Circuit
03	Input Map
04	Set Group
05	Keypad
06	User
07	Output Fn
08	Output Map
09	Output Link
10	Comms
11	Tel Number
12	GSR
13	Module
14	Verify Alm
17	Conc Text
18	Schedule
19	Holiday
20	System
21	Response
30	ACM
31	Access Opts
32	ATM
33	Dormitory
34	Detector
35	Radio
40	Audio Module

System Sub-menu	
Code	**Menu Text**
01	Co.Name
02	Contract
03	Service Num
04	GSR ID
05	Sys.Options
06	Area ID (PX)
06	ID (RX/QX)
07	Reset
08	Sounder
09	Battery Test
10	Panel IP
11	Gateway IP
12	Subnet Mask

Version 4.2 Main menu	
Menu	**Menu Text**
00	Defaults
01	System Size
02	Circuit
03	Input Map
04	Set Group
05	Keypad
06	User
07	Output Fn
08	Output Map
09	Output Link
10	Comms
11	Tel Number
12	GSR
13	Module
14	Verify Alm
15	Alarm Rpt
16	Log Filter
17	Concentrator
18	Schedule
19	Holiday
20	System
21	Response
22	Custom User
23	HS Schedule
30	ACM
31	Access Opts
32	ATM
33	Dormitory
34	Detector
35	Radio
40	Audio Module
50	Video

System Sub-menu	
Code	**Menu Text**
01	Co.Name
02	Contract
03	Service Num
05	Sys.Options
06	Area
07	Reset
08	Sounder
09	Battery Test
10	Panel IP
11	Gateway IP
12	Subnet Mask
13	XiB

Version 4.3 Main menu	
Menu	**Menu Text**
00	Defaults
01	System Size
02	Circuit
03	Input Map
04	Set Group
05	Keypad
06	User
07	Output Fn
08	Output Map
09	Output Link
10	Comms
11	Tel Number
12	GSR
13	Module
14	Verify Alm
15	Alarm Rpt
16	Log Filter
17	Concentrator
18	Schedule
19	Holiday
20	System
21	Response
22	Custom User
23	HS Schedule
30	ACM
31	Access Opts
32	ATM
33	Dormitory
34	Detector Test
35	Radio
36	XIB Detector
40	Audio Module
50	Video

System Sub-menu	
Code	**Menu Text**
01	Co.Name
02	Contract
03	Service Num
05	Sys.Options
06	Area ID
07	Reset
08	Sounder
09	Battery Test
10	Panel IP
11	Gateway IP
12	Subnet Mask
13	XiB Bus

Edit History

When the main edit menu is being displayed, press the ? button to show the date of the last change to the configuration.

Engineer **Wed 05 Jan 2000**	*Engineer or System (GuardStation)*

Edit Mode	**Defaults**	***Code-00***

Defaults Menu
0=Restart **1=Config** **2=Text** **3=User Codes** **4=Eng PIN**

The defaults menu will only be displayed if the engineer PIN code is the first PIN code to be entered after power up. When a default option is selected the panel will display the following message.

Loading Defaults **Please Wait ...**

The panel can also be defaulted by powering up with default link fitted. Refer to the installation manual for details. When the time/date appears on a keypad the configuration will have been defaulted. **The default time is dependent on the panel type and may take more than 5 minutes to complete. This is normal operation.**

Defaults Menu	**Restart**	***Code-0***

If the restart option is selected the panel will log a software error 29 and re-boot the processor. The re-boot has the same effect as recycling the power and ensures that all peripherals are re-initialised.

Defaults Menu	**Config**	***Code-1***

The configuration menu gives you the ability to default the configuration, without defaulting the text descriptors, radio transmitter data, XiB detector data or the user codes. Configuration options include: defaulting to a predetermined configurations; deleting all radio transmitters currently mapped to the system or removing all XiB detectors currently mapped to the system.

Config	**Options**
1=Config 1	*Load default configuration. Appears on all panels.*
2=Config 2	*Only appears on panels with multiple configurations.*
3=Config 3	*Only appears on panels with multiple configurations.*
4=Config 4	*Only appears on panels with multiple configurations.*
5=Radio	*Only delete Radio transmitters from the system*
6=XIB Detectors	*Only delete all XiB Detectors from system*

Defaults Menu	**Text**	***Code-2***

The text option will default the text descriptors for circuits, users, set groups, concentrators, ACMs and the company name.

Defaults Menu	User Codes	*Code-3*

The user codes option will delete all user identification codes, except the engineer PIN code and user 2 code, which will be defaulted to 0202. All users identified by a proximity token will also be deleted, thereby rendering the programmed proximity tokens invalid. When the PIN codes are defaulted a "Restored Code(s)" entry is made in the event log.

Defaults Menu	Eng PIN	*Code-4*

The engineer PIN code option is only available when the PIN of the day option is off. The PIN of the day option can only be programmed using the GSR software package. When the engineer PIN code is defaulted a "Restored Code(s)" entry is made in the event log.

Edit Mode	System Size	*Code-01*

System Size	Options
System Size Area-2	*1-max area*
Conc-0	*0-max concentrator*
Keypad-2	*1-max keypad*
OPM-0	*0-max output module*
ACM-0	*1-max ACM*
Audio Module-0	*0-max audio modules*
RM-0	*0-max radio modules*

The maximum sizes for each panel type are shown in the table.

Feature	RX16i	QX32i	PX48i	PX80i	PX500	PX250HS
Areas	4	8	8	16	32	16
Concentrators	2	6	10	18	64	32
Keypads	4	8	8	16	32	16
Output Modules	1	2	8	16	32	32
Access Modules	0	0	32	32	32	32
Audio Modules	2	4	8	16	32	16
Radio Modules	2	2	4	8	16	8

System Size	Area	*1-max area*

When the number of areas is programmed all area menus (for example when setting) will be limited to the specified area system size.

System Size	Conc	*0-max concentrator*

When the number of concentrators is programmed, the maximum circuit value is set to 8 times the specified concentrator system size, plus 10 on the PX 18 and PX34, plus 1 for each ACM up to the maximum supported by the panel. **The concentrators must be sequentially addressed from 1 up to the concentrator system size limit.** If the number of concentrators is increased then the concentrator input map prompt will be displayed. All auto numbered inputs will be automatically programmed as alarm type.

✔=Auto Number Conc Inputs	*Press ✔to auto number **all** concentrator inputs*

System Size	Keypad	*1-max keypad*

The programmed number of keypads excludes the engineer keypad (keypad 0). **The keypads must be sequentially addressed from 1 up to the keypad system size limit.** If a keypad stops replying the panel will report a keypad communications failure.

System Size	OPM	*0-max output module*

The output module size can be specified in the range 0-max output modules.

System Size	ACM (PX only)	*0-max ACM*

The ACM size can be specified in the range 0-max ACMs. On a PX 80/500/250HS, the maximum number of users is increased to 1000 if an ACM is fitted to the system.

System Size	Audio Modules	*0-max audio module*

The audio module size can be specified in the range 0-max audio modules. If this option is non-zero the audio module menu will be displayed. The number programmed should be the total number of all types of audio module.

System Size	RM	*0-max radio module*

The radio module size can be specified in the range 0-max radio modules. If this option is non-zero the radio module menus will be displayed.

Edit Mode	Circuit	Code-02

The table shows a complete list of circuit options. Some options will not be available on certain circuit types.

Circuits	Options
Circuit-x	*x=Circuit number*
"Descriptor"	*16 characters max*
Off	*Circuit type help menu*
Area-1	*1-max area*
Set-Off	*On/Off*
Unset-Off	*On/Off*
Set Comms-On	*On/Off*
Unset Comms-Off	*On/Off*
ER-Off	*On/Off*
Start Entry-Off	*On/Off*
P/Set Entry-Off	*On/Off*
P/Set Alarm-Off	*On/Off*
Entry Time-030	*000-255 seconds*
System Set-Off	*On/Off*
Bypass-Off	*On/Off*
Isolate	*On/Off (PX250HS only)*
Shunt-Off	*On/Off*
Verify Alm-Off	*On/Off*
Set Group-1	*0-max set groups*
Pulse-Off	*On/Off*
D.Knock-Off	*On/Off*
Power Rst-Off	*On/Off*
Auto Reset-Off	*On/Off*
Monitor-Off	*On/Off*
Eng Rst-Off	*On/Off*
Inertia-Off	*On/Off*
Pulse Count-Off	*On/Off*
Chime-Off	*On/Off*
Tech Alm-Off	*On/Off*
Log-Off	*On/Off*
Auto Check-Off	*On/Off*
Fault EOL-Off	*On/Off*
Response-00	*0-max responses*
Head Count-Off	*On/Off*
Detector-Off	*On/Off (PX250HS)*
Fire Door-Off	*On/Off*
Dormitory-0	*On/Off (PX500/PX250HS)*
TX Poll-Off	*On/Off*
No EOL-Off	*On/Off*
Keyfob-0	*0-max Keyfobs*
Audio Module-0	*0-max audio modules*
ShockTec-Off	*On/Off*
Camera-0	*0-max cameras*

Circuit	Options

The available programmable options is dependent on the circuit type:

Options	Alarm	Final Exit	PA	PB	Shunt	Key	Fire	Eng Rst
Area	✔	✔	✔	✔	✔	✔	✔	✔
Set	✔				✔	✔		
Unset	1				✔	✔		
Set Comms	7							
Unset Comms	8							
ER	2							
Start Entry	9							
P/Set Entry	3							
P/Set Alarm		5						
Entry Time		✔						
System Set	4	6		✔	✔			✔
Bypass	✔	✔				✔		
Isolate	✔	✔	✔	✔	✔	✔	✔	✔
Shunt	✔	✔				✔		
Verify Alm	✔	✔	✔					
Set Group						✔		
Pulse						✔		
D.Knock	✔							
Power Rst	✔						✔	
Auto Reset	✔		✔				✔	
Monitor	✔		✔				✔	
Eng Rst	✔	✔	✔					
Inertia	✔							
Pulse count	11							
Chime	1	✔		✔				
Tech Alm	✔							
Log					✔	✔		✔
Auto Check	✔							
Fault EOL	✔							
Response	✔		✔				✔	
Head Count	✔							
Detector	✔							
Fire Door	10							
Dormitory	✔						✔	
TX Poll	12	12	12	12	12	12	12	12
No EOL	✔	✔	✔	✔	✔	✔	✔	✔
Keyfob	13	13	13	13	13	13	13	13
Audio Module	✔	✔	✔	✔	✔	✔	✔	✔
ShockTec	✔							
Camera	✔		✔					

In the following sections the function of each programming option is detailed. Notes:

1. If the Unset option is on then the ER, P/Set Entry, chime and System Set will not be available.
2. If the ER option is on then the Unset option will not be available.
3. If the P/Set Entry option is on then Unset and System Set will not be available.
4. If the System Set option is on P/Set Entry and Unset will not be available.
5. If the System Set option is on for a final exit circuit type P/Set Alarm will not be available.
6. If the P/Set Alarm option is on then System Set will not be available.
7. The Set comms option will only be available if the set option is on.
8. The Unset comms option will only be available if the unset option is on.
9. The Start Entry option is only available if ER is programmed
10. The Fire Door option is only available if Unset is programmed
11. The Pulse Count option is only available if Inertia is programmed
12. The TX poll option will only be available if the circuit is mapped to a radio transmitter.
13. The Keyfob option is only available if the circuit is mapped to a Visonic radio Keyfob transmitter.

Descriptor	*16 characters max*

The programmed text descriptor will be displayed when the circuit number is entered. Press the ✓button to edit the text descriptor, or ↓ to display the programmed options. Refer to editing text descriptors for full details.

Circuit	Circuit Type	*Circuit type help menu*

Circuit Type Help

0=Off
1=Alarm
2=Final Exit
3=PA
4=PB
5=Shunt
6=Key
7=Fire
8=Eng Rst

The available options are dependent on the programmed circuit type. Unless otherwise stated an option will apply to all circuit types.

The function of each circuit option is explained in the following sections.

Cct Type	Alarm	*Code-1*

An alarm circuit normally has a set only response but any alarm circuit can be programmed with a set and/or unset response. Alarm circuits programmed with the ER option will be ignored during the entry/exit period.

Cct Type	Final Exit	*Code-2*

When a final exit circuit alarms (opens) an entry timer is started. When a final exit circuit clears (closes) during the exit time, and the set group is programmed to use entry/exit setting, then the panel will attempt to set.

Cct Type	PA	*Code-3*

A PA circuit is normally silent but can be programmed with an audible response.

Cct Type	PB	*Code-4*

A PB circuit is a normally open device. The panel will attempt to set when the PB circuit is activated during the exit time. PB setting can be configured with an indefinite exit time (program 0) or, for PB/Timed set mode, program a non zero exit time.

Cct Type	Shunt	*Code-5*

Shunt circuits can be programmed with a set and/or an unset response. When a shunt circuit alarms it will shunt all circuits in its programmed area(s), which are programmed for shunt. The programmed shunt fault output will be activated **only if the shunt circuit clears and a shunted circuit is active**. Active circuits will remain shunted. The programmed shunt output will only be turned off if the shunt circuit changes state and all shunted circuits in the area are clear. The shunt output would normally be used to indicate a fault condition. All shunt operations are logged in the event log as "Shunt On" or Shunt Off".

Cct Type	Key	*Code-6*

The action of a key circuit is to set the programmed circuit area(s) when the key circuit alarms and unset the programmed area(s) when the key circuit clears. Setting and unsetting by a key circuit is logged in the event log as an auto set/auto unset **if the set/unset operation was successful**. If the Log option is on, Key circuit changes of state are logged as a "Key Set Req." (Set request) and "Key Unset Req." (Unset request). If successful then the message, “Auto Set” or Auto Unset” will also be logged.

Cct Type	Fire	*Code-7*

A fire circuit has a 24hr response and is uniquely identified in the event log and in alarm reports. A fire alarm output channel can be programmed. A tamper from a fire circuit also has a special response.

Cct Type	Eng Rst	*Code-8*

The action of an engineer reset circuit is to reset the programmed area(s). This will have the same effect as an engineer logging on and will:

- Clear the call engineer condition.
- Reset any customer reset codes.
- Clear the Engineer reset output.

The attributes that appear within the Circuit types are detailed starting on the following page.

Circuit Options	Area	*1-max area*

All circuits must be programmed in an area. All circuit alarms will be stored in the area log for the programmed area even if the circuit has **System Set** enabled.

Circuit Options	Set	*On/Off*

When this option is applied to a key type circuit then the panel will attempt to set the programmed set group when the circuit alarms. If this option is applied to other types of circuit then the circuit will have a set response.

Circuit Options	Unset	*On/Off*

When this option is applied to a key type circuit then the panel will attempt to unset the programmed set group when the circuit clears unless the Pulse option is also programmed. If this option is applied to any other types of circuit then the circuit will have an unset response. This option will not be available for an alarm if either the **ER**, **System Set** or **P/Set Entry** options is on.

Circuit Options	Set Comms	*On/Off*

If a circuit is programmed with the set comms option, the panel will signal circuit alarm events when the area containing the circuit is set. This option only applies to alarm type circuits.

Circuit Options	Unset Comms	*On/Off*

If a circuit is programmed with the unset comms option, the panel will signal circuit alarm events when the area containing the circuit is unset. This option only applies to alarm type circuits.

Circuit Options	ER	*On/Off*

If the ER (Entry Route) option is programmed circuit activations are ignored when setting and unsetting. This option will not be available if the **Unset** option is on.

Circuit Options	Start Entry	*On/Off*

An ER circuit programmed with the start entry option will start the entry sequence if a final exit circuit is auto bypassed at the end of the verification period.

Circuit Options	P/Set Entry	*On/Off*

If an alarm circuit is programmed with the part set entry option, then the response when part set will be the same as a final exit circuit. This option will not be available if either the **Unset** or **System Set** options are on.

Circuit Options	P/Set Alarm	*On/Off*

If a final exit circuit is programmed with the part set alarm option, then the response when part set will be the same as an alarm circuit. This option will not be available if the **System Set** option is on.

Circuit Options	Entry Time	*000-255 seconds*

Each final exit circuit may be programmed with an entry time.

Circuit Options	System Set	*On/Off*

This option is normally not be available if either the **Unset**, **P/Set Alarm** or **P/Set Entry** options are on. If the programmed circuit type is shunt then both system set and unset are allowed. The effect of this option depends on the circuit type.

1. When setting, a **Final Exit** or **PB** circuit will be ignored unless all unset areas are being set.
2. When set a **Final Exit** circuit will be ignored unless all areas are set.
3. **Alarm** circuits will only be armed when the system is set.
4. **Eng Rst** or **Shunt** circuits will operate on all areas.

Circuit Options	Bypass	*On/Off*

Only circuits configured for bypass can be bypassed by a user. The panel will ignore alarms from bypassed circuits. See also the system Temp Bypass and Force Set options.

Circuit Options	Isolate (PX250HS only)	*On/Off*

Only circuits configured for isolate can be isolated by an authorised user. The panel will ignore all off normal states from bypassed circuits.

Circuit Options	Shunt	*On/Off*

A circuit with the shunt option on will be ignored when a circuit programmed as a shunt type alarms.

Circuit Options	Verify Alm	*On/Off*

If two circuits, programmed with the verify alarm option, activate within the programmed time period (See Verify Alarm menu) then a verified alarm message will be transmitted. Verified alarms can be signalled in any alarm format. Individual circuit responses can optionally be signalled (See Verify Alarm menu).

Circuit Options	Set Group	*0-max set groups*

A key circuit can be programmed to control any set group.

Circuit Options	Pulse	*On/Off*

If the option is on then the panel will attempt to change the area set status when the circuit is active. There will be no action when the circuit clears. The actual action will also depend on the Set and Unset options. For example, if the Pulse and Set options are on and the Unset option is off, then the panel will attempt to set the programmed area(s) each time the key circuit is activated.

Circuit Options	D.Knock	*On/Off*

If a circuit is programmed with this option, then an alarm response will only be given if the circuit activates twice in one set or one unset period.

Circuit Options	Power Rst	*On/Off*

If a circuit programmed with the power reset option requires a reset, all programmed area power reset outputs will be activated to remove power from the detectors. If any circuit in a setting area is programmed with the power reset option then the power reset output(s) will be activated prior to setting. This will result in a 5 second delay before setting starts during which time a prompt is displayed.

Circuit Menu	Auto Reset	*On/Off*

At the end of the sounder time, if the system auto reset option is on, the panel will attempt to reset the alarm latch of any circuit programmed with the auto reset option. This option only applies if the circuit area is set, and will only continue until the circuit individual multiple alarm limit is reached.

Circuit Menu	Monitor	*On/Off*

If a circuit is programmed with the monitor option, the panel will reset the alarm latch when the circuit state returns to normal. The multiple alarm count will not apply to a circuit with the monitor option on.

Circuit Options	Eng Rst	*On/Off*

The system may be programmed for engineer reset. An engineer reset will only be required if a circuit with Eng Rst programmed alarms. This will not occur if the user logs on within the programmable alarm abort period.

Circuit Options	Inertia	*On/Off*

If a circuit is programmed with this option, the programmed debounce time (see system options) will be used in place of the normal alarm response time. This option should only be enabled if the inertia sensor is directly connected to an input that supports inertia sensors (refer to the installation manual for details). A pulse count option may also be programmed for circuits programmed with the inertia option.

Circuit Options	Pulse Count	*On/Off*

This option will only be available if the inertia option is programmed for the circuit. If a circuit is programmed for pulse count, the circuit alarm debounce is ignored and the panel will count pulses from the circuit. If the programmed pulse count is reached within the programmed pulse count period (refer to system options), an alarm response will be given. Use this option for inertia or vibration sensors.

Circuit Options	Chime	*On/Off*

If a circuit programmed for chime activates in the unset period, an audible chime is given on all keypads programmed with the bleeper option. An authorised user may also edit this option. Only keypads that have authority over the circuit area will chime. Outputs programmed as Audio will also activate.

Circuit Options	Tech Alm	*On/Off*

If the Tech Alarm option is on, the panel will report activations from the circuit as a technical alarm in point ID or SIA formats.

Circuit Options	Log	*On/Off*

This option applies to circuit types that do not have an alarm response. If the log option is off circuit activations will not be logged.

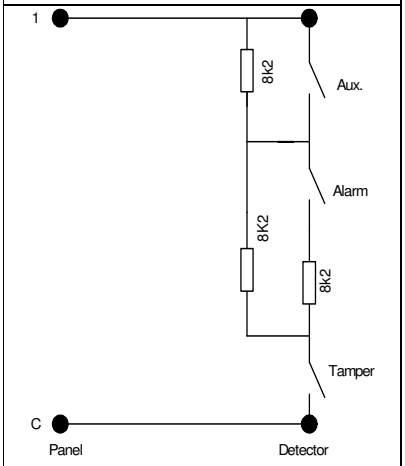
Circuit Options	Auto Check	*On/Off*

If a circuit is programmed for auto check, the panel will expect the circuit to alarm at least once during the programmed circuit check period (see system options). If a circuit fails to alarm during this time then the area containing the circuit cannot be set. Setting can only proceed after the circuit has been activated. Circuits that are bypassed or isolated do not need to be tested.

Circuit Options	Fault EOL	*On/Off*

All circuits inputs programmed as an alarm type can be programmed with the Fault EOL option. If the Fault EOL option is on then the alarm, tamper and auxiliary outputs of a detector can be connected to a single circuit input.

This option may only be used if the system is programmed to use the **standard Guardall resistor network**.

EOL Network with Fault	
	The EOL resistors are fitted in the detector as shown. Note that the Guardall V12-AM detector has the necessary 3 EOL resistors fitted on board. For full information refer to the V12-AM manual. A fault EOL resistor may only be used if the system is programmed to use the **standard Guardall resistor network**.

Circuit Options	Response	*0-max responses*

If the circuit alarm response is 0, the default response will be used. The programmed response number must be pre-configured (refer to the **Response** option) and assigned to the required circuit(s).

Circuit Options	Head Count	*On/Off*

If the head count is on for a circuit then all activations when the system is unset are counted. When the system is set the number of activations from all circuits programmed with the head count option is logged in the event log.

Circuit Options	Detector (PX250HS)	*On/Off*

This option only applies to an alarm type circuit. Circuits programmed with the detector test option may be tested automatically. Refer to the section on the detector programming options for details.

Circuit Options	Fire Door	*On/Off*

This option only applies to an alarm type circuit. The circuit Fire Door option will only be available if the circuit is programmed with an unset response. A circuit with the fire door option on will operate as an alarm type when set. When unset the circuit alarm response will only log the event and activate all programmed fire door outputs. The log message is “Fire Door Open” and may only be reset when the fire door is closed. The fire door output(s) will be cleared unconditionally when a user logs on.

Circuit Options	Dormitory (PX500/PX250HS)	*0-2*

This option only applies to an alarm or fire type circuits. Refer to the section on the dormitory programming options for details.

Circuit Options	TX Poll	*On/Off*

By default all radio transmitters added to the system will have the polling option enabled. if required, polling can be disabled for individual transmitters.

Circuit Options	No EOL	*On/Off*

If required, the EOL resistors can be omitted from individual circuit inputs. The programmed EOL values will be used only for circuits with the No EOL option turned off.

Circuit Options	Keyfob	*0-max Keyfobs*

The Keyfob option is only available if the circuit is mapped to a Visonic radio Keyfob transmitter. The Keyfob number programmed for the circuit is the Keyfob response, which is programmed in the radio menu.

Circuit Options	Audio Module	*0-max audio modules*

This option will only be displayed if the system is programmed with at least one audio module (see system size).

When a circuit with audio configured alarms the microphone(s) on the programmed audio module will be activated. If the audio bus interface has a record facility then recording will start automatically.

Circuit Options	ShockTec	*On/Off*

This option is for use with ShockTec sensors. If this option is on then the interpretation of the alarm/fault conditions is modified. The ShockTec has 2 outputs, the shock output is wired to through the fault EOL resistor and the contact output is wired to through the alarm EOL resistor. When the shock output is active the panel will start a 30-second timer. If the alarm contact opens during the 30-second period than an alarm response will be given. The alarm output is ignored at all other times.

Circuit Options	Camera	*0-max cameras*

If the system supports video cameras then each circuit can be mapped to a camera. The maximum number of cameras that can be connected will depend on the control panel variant (refer to the installation manual for details). For full information on video recording refer to the Video verification manual.

Edit Mode	Input Map	Code-03

Input Map Menu

1=Panel IP
2=Conc IP
3=Keypad IP

The door circuit input on an ACM may be mapped using the door circuit option in the access control menu (edit option 30).

Input Map	Panel IP (Not PX500/PX250HS)	Code-1

Panel Inputs	Options
Panel IP1-01	*0-max circuits*
IP2-02	*0-max circuits*
IP3-03	*0-max circuits*
IP4-04	*0-max circuits*
IP5-05	*0-max circuits*
IP6-06	*0-max circuits*
IP7-07	*0-max circuits*
IP8-08	*0-max circuits*

Input Map	Conc IP	Code-2

Panel Inputs	Options
Conc-1 IP1-11	*1-max concentrators* *0-max circuits*
IP2-12	*0-max circuits*
IP3-13	*0-max circuits*
IP4-14	*0-max circuits*
IP5-15	*0-max circuits*
IP6-16	*0-max circuits*
IP7-17	*0-max circuits*
IP8-18	*0-max circuits*

Input Map	Keypad IP	Code-3

Keypad Inputs	Options
Keypad-n IP1-00	*1-max keypads* *0-max circuits*
IP2-00	*0-max circuits*

Edit Mode	Set Group	Code-04

Set Group	Options
Set Group-x	*x=Set Group Number*
"Descriptor"	*10 characters max*
Area 1-Off	*On/Off*
Area 2-Off	*On/Off*
. . .	
Exit Time-030	*0-255 seconds*
Silent Set-Off	*On/Off*
LogOn/Unset-Off	*On/Off*
Common-Off	*On/Off*
Sub System-1	*1-max sub systems*
Match-Off	*On/Off*
Level-0	*0-3*
HS Schedule-0	*0-max schedules (PX250HS)*
Sched.Unset-Off	*On/Off (PX250HS)*
Schedule-0	*0-max schedules (not PX250HS)*
Set Warning-00	*0-30 minutes*
NotUnset Alm-Off	*On/Off (PX250HS)*
Dual Set-Off	*On/Off (PX250HS)*
Dual Unset-Off	*On/Off (PX250HS)*
Unset Delay-00	*0-30 minutes (PX250HS)*
Early Set-00	*0-30 minutes (PX250HS)*
Auto Shunt-Off	*On/Off (PX250HS)*
Alarm Unset-00	*0-99 minutes (PX250HS)*
Perimeter-Off	*On/Off (PX250HS)*

Set Group Menu	Descriptor	10 characters max

The programmed text descriptor will be displayed when the set group number is entered. Press the ✓button to edit the text descriptor. Refer to editing text descriptors for full details.

Set Group Menu	Area 1-n	On/Off

A set group is a group of areas, which provides the end user with a simple method of setting more than one area with a single key press. Any combination of areas may be programmed in a set group. An area can be programmed in more than 1 set group.

Set Group Menu	Exit Time	0-255 seconds

The set mode will depend on the programmed set group exit time:

1. 0=Entry exit or PB setting, unlimited exit time. If a PB circuit is programmed in an area then PB setting will apply to that area.
2. 1=Instant setting (in reality any low value of exit time)
3. 2-255 Timed setting

Set Group Options	Silent Set	On/Off

If the silent set option is on for a set group then there will be no audible indication during setting.

Set Group Menu	LogOn/Unset	On/Off

When a user logs onto a keypad, all authorised set groups programmed for LogOn/Unset, will be unset automatically.

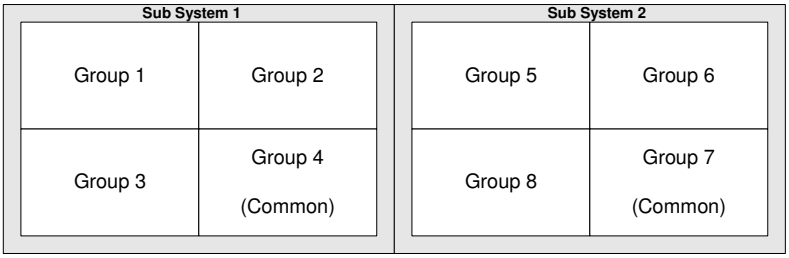
Set Group Menu	Common	*On/Off*

A set group can be programmed as a common. A set group programmed as a common will be automatically set if the common set group area(s) is the last unset area, and will be automatically unset if any area is unset. A user does not need to have authority for the common set group, and there can be more than one in a system. The common setting mode will be determined by the programmed system exit time (refer to system options). Set groups programmed as common are not displayed in the set menu.

Set Group Menu	Sub System	*1-max sub system*

A number of sub systems can be programmed. A sub system consists of a number of set groups and a common group. When all programmed groups, with the exception of the sub system common group, in the sub system are set then the sub system common group will be set automatically. Only one common group should be programmed for each sub system.

The following example shows how a control panel with 2 sub system could be configured. There is no restriction on the number of set groups that can be programmed in each sub system.

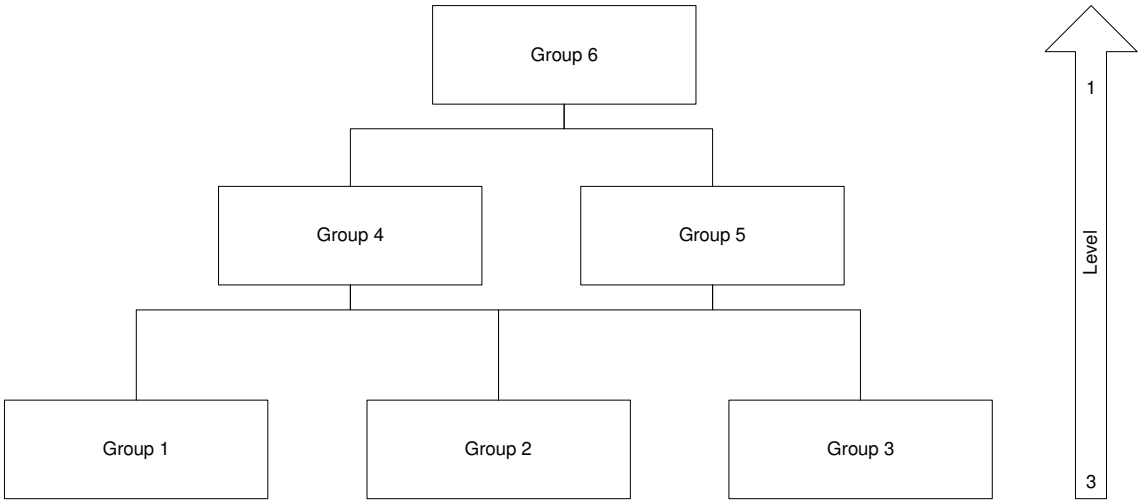


Set Group Menu	Match	*On/Off*

The match option determines when a set group can be selected for set and unset. If the match option is on then all programmed areas in a set group must be available before the group can be selected. If the match option is off then a group can be selected if any area in the group is available. As an example, if set group 1 was programmed as Area 1 and Area 2, and Area 1 was set, then set group 1 could not be set if the match option was programmed. If the match option was off then a user could set group 1.

Set Group Options	Level	*0-3*

A set group can be programmed with a level number. When setting a set group that is programmed with a non-zero level all lower set groups must be set. When unsetting a set group that is programmed with a non-zero level all higher set groups must be unset first. The highest level is 1 and the lowest level is 3. In the following example Groups 4 or 5 cannot be set until Groups 1-3 are set. When unsetting, group 3 cannot be unset until Groups 4-6 are unset.



Set Group Menu	HS Schedule (PX250HS)	*0-max_schedules*

A set group in a PX250HS can be programmed with an HS Schedule. An HS schedule includes the following times:

- Shunt On
- Open 1 (this will be the auto unset time if the group schedule unset option is on)
- Close 1
- Set 1
- Open 2
- Close 2
- Set 2
- Latest Set
- Shunt Off 2

Refer to the HS Schedule programming menu for full details.

Set Group Menu	Sched.Unset (PX250HS)	*On/Off*

The programmed HS schedule in a PX250HS does not allow automatic unsetting unless the schedule unset (Sched.Unset) option is on.

Set Group Menu	Schedule (Not PX250HS)	*0-max_schedules*

A set group can be automatically set and unset by a schedule. The set group will set at the schedule start time using the system exit time and unset at the schedule stop time. The system exit time will be used for automatic setting. If the scheduled start time is 00:00 then the set group will not be set automatically. If the scheduled stop time is 00:00 then the set group will not be unset automatically.

Set Group Options	Set Warning	*0-30 minutes*

This option applies to both of the schedule set times. If programmed a warning will be generated on the keypad(s) in the setting group(s). The warning starts at the programmed number of minutes before the schedule set time. Program 0 to disable this feature. The warning tone will be cancelled if a user logs on during the set warning period. All programmed Set Warning outputs will be activated during the set warning period.

Set Group Options	NotUnset Alm (PX250HS)	*On/Off*

This option applies to both of the schedule unset times. If the group is not unset by the schedule close time an alarm can be programmed. The alarm may be signalled in SIA, point ID or Guardall formats.

Set Group Options	Dual Set (PX250HS)	*On/Off*

If programmed 2 valid (set authority for the selected group) user codes must be entered to set the group.

Set Group Options	Dual Unset (PX250HS)	*On/Off*

If programmed 2 valid (unset authority for the selected group) user codes must be entered to unset the group. The log on unset option is ignored if a set group is programmed with the dual unset option.

Set Group Options	Unset Delay (PX250HS)	*0-30 minutes*

If programmed and a user requests unset, the group will not be unset until after the programmed unset delay period.

Set Group Options	Early Set (PX250HS)	*0-30 minutes*

This option only applies when setting with a schedule. If a group is manually set before the scheduled set time then it may be unset up to the number of early set minutes after the time the group was set. This option allows a user to unset outside the open/close schedule window if, for example, a group is accidentally set before the normal auto set time.

Set Group Options	Auto Shunt (PX250HS)	*On/Off*

If the set group auto shunt option is on then all shuntable circuits in the set group area(s), up to the shunt limit, will be shunted when the programmed perimeter set group(s) is unset. The shunt will be removed when the perimeter is set.

Set Group Options	Alarm Unset (PX250HS)	*0-99 minutes*

This option only applies when an open/close schedule is programmed. If programmed a user may unset the group following an alarm. The group will re-arm automatically at the end of the programmed alarm unset period. There is no set warning at the auto re-arm time.

Set Group Options	Perimeter (PX250HS)	*On/Off*

When a perimeter area(s) is unset then all shuntable circuits in the areas programmed with auto shunt will be shunted. The isolate will be removed from the circuits when the circuit area(s) is next set.

Edit Mode	Keypad	Code-05

Keypad	Options
Keypad-x	*x=Keypad number*
Group 1	*On/Off*
Group 2	*On/Off*
….	
Group 32	*On/Off*
Exit Time-1	*0-255 seconds, 1=use Set group exit times (PX250HS only)*
Bleeper-On	*On/Off*
Dual Code-Off	*On/Off (PX only)*
Schedule-0	*0-max schedules (PX500/PX250HS)*
LogOff/Set-Off	*On/Off*
LogOff/Unset-Off	*On/Off*
Set Tone-000	*0-255 seconds*
Log Access-Off	*On/Off*
Set-On	*On/Off (PX250HS)*
Unset-On	*On/Off (PX250HS)*
User LogOff-1	*1-255 minutes (PX250HS)*
Ext.RD Wieg.-Off	*On/Off*
PIN OVR-Off	*On/Off (PX250HS)*

Keypad Menu	Set Group 1-max	On/Off

The keypad can be programmed for any combination of set groups.

Keypad Menu	Exit Time (PX250HS only)	0-255 seconds

If a keypad exit time is programmed then it will be used in place of the set group exit time. The set mode will depend on the programmed keypad exit time:

0=Entry exit or PB setting, unlimited exit time. If a PB circuit is programmed in an area then PB setting will apply.
1=Set group exit time applies
2-255 Timed setting

Keypad Menu	Bleeper	On/Off

Each keypad can be programmed for an audible response. Audible feedback for key presses and faults will always be given but alarms and entry/exit tones will only be given if the keypad bleeper option is on.

Keypad Menu	Dual Code	On/Off

Each keypad can be programmed for dual code operation. To log on to a dual code keypad, two valid codes must be entered within a 2-minute period. The same code may not be entered twice. Both user numbers are stored in the event log. Only the authority of the second entered code is used for menu access, but the authority of the first code user must not be off.

Keypad Menu	Schedule	0-max schedules

If a schedule number is programmed then the keypad will only be in service between the schedule start and stop times. Outwith these times the display will show “Out of Service” and key presses are ignored.

Keypad Menu	LogOff/Set	On/Off

Each keypad can be programmed to log off the user after setting. This option only applies when using instant setting. If any other set mode is being used then the user is always logged off after setting.

Keypad Menu	LogOff/Unset	*On/Off*

Each keypad can be programmed to log off the user after unsetting an area(s).

Keypad Menu	Set Tone	*0-255 seconds*

Normally instant setting is silent. If a set tone duration option is programmed then there will be an audible set tone from the keypad when instant setting. The set tone option will be ignored if silent set is on for the group (refer to set group options). The set tone is also used when unsetting with faults present.

Keypad Menu	Log Access	*On/Off*

Users with access authority will only be logged if the log access option is on.

Keypad Options	Set (PX250HS)	*On/Off*

A keypad must be programmed to allow set. If the set option is off an authorised user can still select all other options for the programmed set groups.

Keypad Options	Unset (PX250HS)	*On/Off*

A keypad must be programmed to allow unset. If the unset option is off an authorised user can still select all other options for the programmed set groups

Keypad Options	User LogOff (PX250HS)	*1-255 minutes*

The user auto logoff time may be programmed for a keypad. If any keypad set group is programmed for timed setting then the keypad log off time must exceed the programmed exit time.

Keypad Options	Ext. RD Wieg.	*On/Off*

A Guardall external reader (W73821) may connected to the system in 2 ways.

1) The simplest method is to use the white wire connected to the keypad D input.

2) If a longer cable length is required then a second method may be used.
The orange wire (DAT0) is connected to the C terminal, and the blue wire (DAT1) is connected to the D terminal.

To use this connection method the keypad must be a version 2 keypad or later and must be programmed for external reader Wiegand format. The keypad must not be fitted with an internal reader.

Keypad Menu	PIN OVR (PX250HS only)	*On/Off*

If the PIN Override option is on then the normal unset restrictions (for example an open/close schedule) can be overridden by entering an invalid PIN code 3 times, followed by a valid user code.

Note: If the PIN Override option is required then the system “Code Attempts” option must be programmed for at least 4 attempts

Edit Mode	User	*Code-06*

Enter the user number in the range 2-max users. The user menu will then be displayed. Access system users can be added quickly using the "Add User" menu option (50). The user 2 configuration may only be changed by user 1 or user 2.

User	Options
1=Name	
4=Authority	
5=ACM Authority	*PX only*
6=Schedule	
7=Lockout	*PX only*

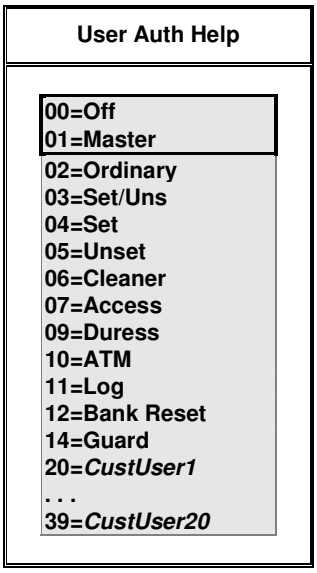
User Menu	Name	*Code-1*

The programmed text descriptor will be displayed. Press the ✓button to edit the text descriptor. Refer to editing text descriptors for full details. A user name can be up to 10 characters long.

User Menu	Authority	*Code-4*

Users can be programmed with a number of options including authority level area access and timed access. When a new user is added using option 50 (Add user) the user authority is automatically set to Access for all ACMs. When the authority option is selected the user authority menu is displayed.

User	Options
User-nnnn	*nnnn=User number*
User Name	
Master	*Press **?** for list of user authorities*
Code Change-On	*On/Off (not available to users with Master authority)*
LogOn/Set-On	*On/Off*
LogOn/Unset-On	*On/Off*
Shunt-Off	*On/Off (PX250HS), allows user access to menu option 33*
Card+PIN-Off	*On/Off*
Group 1-Off	*On/Off*
Group 2-Off	*On/Off*
…	
Group 32-Off	*On/Off, the number of groups depends on the panel type*



RX/QX only

PX250HS only
PX250HS only
PX250HS only

The programmed names for custom users will be displayed (PX250HS only)

The available menu options are dependant on the programmed user authority. For full details of options available for each user type, refer to the User authority table in Appendix B. Further details are also available in the User Manual.

User Authority	**Off**	***Code-00***

No available menus or authority.

User Authority	**Master**	***Code-01***

A user with Master authority has access to many of the main menu options. He is responsible for administering users on the System.

User Authority	**Ordinary**	***Code-02***

A user with Ordinary authority has fewer menus than a Master, and is able to Set, Unset, Reset, Test, change Time, and authorise Engineer access.

User Authority	**Set/Uns**	***Code-03***

A user with Set/Uns authority is able to Set, Unset, Reset and authorise Engineer access.

User Authority	**Set**	***Code-04***

A user with Set authority is able to Set, and to authorise Engineer access.

User Authority	**Unset**	***Code-05***

A user with Unset authority is only able to Unset.

User Authority	**Cleaner**	***Code-06***

A user with Cleaner authority is only able to Set and Unset.

User Authority	**Access (RX/QX Only)**	***Code-07***

A user with Access authority is allowed ACM authority, but has no authority on the Intruder Panel.

User Authority	ATM (PX250HS)	*Code-10*

A user with ATM authority is able to Set and Unset, but Unset is only allowed for a limited time. This allows ATM cash machines to be re-filled.

User Authority	Log (PX250HS)	*Code-11*

A user with Log authority is able to view or print event log details (when Set or Unset).

User Authority	Bank Reset (PX250HS)	*Code-12*

A user with bank reset authority has access to the log and reset options. The log must be viewed before events can be reset when the system is still set. If a bank reset user attempts to reset an active bypassable circuit then the circuit will be automatically bypassed.

User Authority	Guard	*Code-14*

A user with Guard authority is able to view or print event log options (when set).

User Authority	Custom User 1-20 (PX250HS)	*Code-20-39*

Users can be programmed with a custom authority. Custom authorities are set up in the custom authority menu (option 22).

User Authority Menu	Code Change	*On/Off*

Some user types are allowed by default to change their own code (refer to authority table). This feature can be disabled for any user without master authority.

User Authority Menu	LogOn/Set	*On/Off*

If this option is on then either a list of the groups, which can be set, will be displayed when logging on or, if there Is only one set group available, setting will start when the user logs on.

User Authority Menu	LogOn/Unset	*On/Off*

If this option is on then the authorised set groups, which are set and programmed for log on/unset, will be unset when the user logs on.

User Authority Menu	Shunt (PX250HS)	*On/Off*

If this option is on the user has access to the shunt menu option (33).

User Authority Menu	Card+PIN	*On/Off*

If the user is configured with the Card+PIN option then BOTH the PIN code and the card must be used to log onto a keypad. The PIN code and card may be used in any order. This option does not apply when using an access module. If Card+PIN is off then a user may log onto a keypad using EITHER a PIN code or card.

User Authority Menu	Set Group 1- max	*On/Off*

If the Set Group option is on, the user can be programmed for any combination of set groups.

User Menu	ACM Authority (PX only)	Code-5

Each user can be programmed for any combination of the available ACMs.

User	Options
User-nnnn	*nnnn=User number*
Enable-Off	*On/Off, this option must be on to view other options*
Level-Normal	*Press **?** for list of user level options*
ACM 1-Off	*On/Off*
. . .	
ACM 32-Off	*On/Off*
Challenged-Off	*On/Off*

ACM Options	Challenged	On/Off

If a user is programmed as challenged then the door release and open times will be automatically doubled for the user.

ACM Options	Level	User level Help Menu

User ACM Level
0=Normal
1=Visitor
2=Escort
3=Supervisor

User access restrictions may apply and will depend on the programmed user level and the programmed access door mode (Refer to option 30 for details). There are no restrictions on exit.

User Access Restrictions				
User Mode	**Door Mode**			
	Normal	**Dual**	**Escort**	**Supervisor**
Normal	✔	1	✔	✗
Visitor	✔	✗	2	✗
Escort	✔	1	4	✗
Supervisor	✔ (3)	✔ (3)	✔ (3)	✔ (3)

Notes:
1. Dual mode access requires 2 users with either Normal, Escort or Supervisor authority.
2. A visitor user may only gain access within 10 seconds of an escort user presenting their token.
3. A supervisor user can access a door with lockout enabled.
4. An escort user can gain access by presenting their token twice within 10 seconds.

User Menu	Schedule	Code-6

Refer to the main user menu for details on programming a schedule in these products. A user can be programmed with a schedule to control access times. Program 0 to allow 24hr access.

User Menu	Lockout	Code-7

A user can be locked out of the system at any time. All user configuration is retained while a user is locked out. This option will remain active until disabled by a master or engineer user.

User-nnnn	*The user number*
Lockout-Off	*On/Off*

Edit Mode	Output Fn.	*Code-07*

Enter the output number to access the output function menu.

Output	Options
Output Fns.-x	*x=Output number*
Function	*Output function help menu*
Parameter	*Refer to output function table on the following page*
Set Group-01	*0-max set groups*
Invert-Off	*On/Off*
Set-Off	*On/Off*
Unset-Off	*On/Off*
Delay-000	*0-255 units*
Cancel Delay-Off	*On/Off*
On Time-000	*0-255 units*
Cancel Timer-Off	*On/Off*
Units-Seconds	*Units help menu*
AND Logic-Off	*On/Off*
Pulse-Off	*On/Off*
Count-0	*0-20 [PX250HS only]*

Output Functions *Output function help menu*

Output Functions	Options
00=Off	
01=Alarm	*0-max set groups*
02=Tamper	*0-max set groups*
03=Intruder	*0-max set groups*
04=L. Freeze	*0-max set groups*
05=Power Rst	*0-max set groups*
06=Walk Test	*0-max set groups*
07=Entry/Exit	*0-max set groups*
08=Set	*0-max set groups*
09=PA	*0-max set groups*
11=Auto Reset	*0-max set groups*
12=Bypass	*0-max set groups*
13=Call Engineer	*0-max set groups*
14=Auto Set Fail	*0-max set groups*
15=Ready	*0-max set groups*
16=Shunt Fault	*0-max set groups*
17=Fire	*0-max set groups*
18=Detector Test	*0-max set groups*
19=Set Warning	*0-max set groups*
20=A/Set Fault	*0-max set groups*
21=Fire Door	*0-max set groups*
22=Cct Fault	*0-max set groups*
23=Unset	*0-max set groups*
24=Set/Uns	*0-max set groups*
25=Set Bypass	*0-max set groups*
26=Set Fail	*0-max set groups*
30=Cct Status	*1-max circuit*
31=Cct Latch	*1-max circuit*
32=Verify Alm	*0-max set groups*
33=Alarm Abort	*NONE*
34=Engineer	*NONE*
35=Schedule	*1-max schedules*
36=Log On	*1-max KPs*
37=GSR Output	*1-max output functions*
38=User Access	*1-max KPs*
41=Line Fault	*NONE*
42=Battery Low	*NONE*
43=230v Fault	*NONE*
44=Power Fail	*NONE*
45=Bat.Test Fail	*NONE*
46=Comms Test	*NONE*
47=Fault	*NONE*
48=Rmt.Auth Fail	*NONE*
49=Sounder	*0-max set groups*
50=Strobe	*0-max set groups*
51=Audio	*0-max set groups*
52=Marginal	*NONE*
53=Off Hook	*NONE*
54=Comm OK	*NONE*
57=Cct Alm/Tam	*1-max circuit*
60=Output Link	*Output link number*

Output Functions	Alarm	Code-01

This output will be turned on by any circuit programmed as an alarm type or entry alarm. It will be turned off when a user resets.

Output Functions	Tamper	Code-02

This output will be turned on if any tamper occurs. It will be turned off if all tampers are clear when a user resets.

Output Functions	Intruder	Code-03

The intruder option applies to a circuit alarm, tamper and entry alarm. Alarm circuits with the anti mask option on will not trigger the intruder output. The intruder output(s) will be cleared at the end of the verification time in UK variants.

Output Functions	L. Freeze	Code-04

This output is active low (positive removed) when a circuit in the programmed area alarms. It remains active until the area is next set or reset.

Output Functions	Power Rst	Code-05

This output will be turned on during a reset of a circuit programmed for power reset. It will normally be turned off after a programmed on time. The power reset output must be programmed with an on time not exceeding 5 seconds.

Output Functions	Walk Test	Code-06

This output will be turned on during walk testing. It remains active until the walk test is completed.

Output Functions	Entry/Exit	Code-07

This output will be turned on during the area entry and exit times.

Output Functions	Set	Code-08

This output will be turned on when the selected area(s) is set. It remains active until the area(s) is unset.

Output Functions	PA	Code-09

This output will be turned on when a PA circuit alarms in the programmed area. It will be turned off when a user logs on.

Output Functions	Auto Reset	Code-11

This output will be turned on if any circuit in the programmed area is in alarm at the end of the programmed sounder period. It will be turned off when all circuits are clear (tested every minute) or when the area is unset.

Output Functions	Bypass	Code-12

This output will be turned on if any circuit in the programmed area is bypassed. It will be turned off when all circuits in the area are normal.

Output Functions	Call Engineer	Code-13

This output will be turned on if the programmed area requires an engineer reset. It will be turned off when an engineer logs on.

Output Functions	A.Set Fail	Code-14

This output will be turned on if the programmed area(s) cannot auto set by a schedule, key circuit or ACM. It will be turned off when the area is reset or set.

Output Functions	Ready	Code-15

This output will be turned on if the programmed area(s) is ready to set (all Alarm type circuits are clear).

Output Functions	Shunt Fault	Code-16

This output will be turned on if a circuit is in alarm when the shunt is removed. It will be turned off when the shunt circuit changes state (shunt removed) and the shunted circuit is clear.

Output Functions	Fire	Code-17

This output will be turned on if a fire circuit is in alarm.

Output Functions	Detector Test (PX250HS)	Code-18

The detector test output will be active during the detector test period. This type of output is used to trigger a response from the detectors that are programmed with detector option.

Output Functions	Set Warning	Code-19

A Set warning output will be active during the set warning period.

Output Functions	A/Set Fault	Code-20

An auto set with fault output will be activated when a set group(s) sets with faults. Note that the set group set with faults option must be on. The output is turned off when the set group is unset. Setting with faults is logged and may be signalled in point ID or SIA format.

Output Functions	Fire Door	Code-21

A fire door output will be turned on when a fire door circuit in the programmed set group activates when unset. The output will be turned off when a user logs on.

Output Functions	Cct Fault	Code-22

A Cct Fault output will be active when there is a circuit(s) fault alarm present in the programmed area(s). If the circuit is a radio transmitter the fault condition includes poll and battery faults. For a wired circuit fault the circuit must have the Fault EOL option programmed.

Output Functions	Unset	Code-23

This output will be turned on when the programmed area(s) is unset. It remains active until the area(s) is set.

Output Functions	Set/Uns	Code-24

This output will be turned on and off when the programmed area(s) is set or unset and must be programmed with an on time.

Output Functions	Set Bypass	Code-25

This output will be turned on when the programmed group sets with a circuit(s) bypassed and will be off when the programmed group is unset.

Output Functions	Set Fail (PX250HS)	Code-26

This output will be turned on if the programmed area(s) cannot manually set. It will be turned off when the area is selected to set.

Output Functions	Cct Status	Code-30

This output will follow the circuit input status in real time irrespective of the circuit alarm state.

Output Functions	Cct Latch	Code-31

This output will be turned on when the programmed circuit number alarms. The output will be turned off when the circuit latch is reset.

Output Functions	Verify Alm	Code-32

This output will be turned on if a verified circuit alarm sequence occurs. It will be turned off when a user resets.

Output Functions	Alarm Abort	Code-33

This output will be turned on if a user aborts an alarm transmission. This output will normally be reset after the programmed on time.

Output Functions	Engineer	Code-34

This output will be turned on if an engineer logs on the system. It will be turned off when an engineer logs off.

Output Functions	Schedule	Code-35

This output will be turned on at the programmed schedule start time and be turned off at the programmed schedule stop time.

Output Functions	Log On	Code-36

This output will be turned on if a user logs on to the programmed keypad. It will be turned off when the user logs off. Engineer and access user log-ons do not activate this output function.

Output Functions	GSR Output	Code-37

This output is controlled by a DTMF command received by the Speech dialler or from GSR. Refer to the user manual for full details..

Output Functions	User Access	Code-38

This output will be turned on if an access user logs on to the programmed keypad. It will be turned off at the end of the programmed on time. This option must be programmed with an on time.

Output Functions	Line Fault	Code-41

This output will be turned on if a telephone line fault is present for more than the line fault enable period (refer to comms options). It will be turned off if the line condition is normal when a user resets.

Output Functions	Battery Low	Code-42

This output will be turned on when the supply voltage falls to the low voltage threshold. It will be turned off if the supply voltage is normal when a user resets.

Output Functions	230v Fault	Code-43

This output will be turned on if the mains supply fails for more than the programmed 230v Delay period (Refer to the Reset options)). It will be turned off when the mains supply is restored.

Output Functions	Power Fail	Code-44

This output will be turned on when the supply voltage falls to the power fail threshold. It will be turned off when the supply voltage exceeds the power fail threshold.

Output Functions	Bat.Test Fail	Code-45

This output will be turned on if the battery voltage is low during an automatic battery test. It will be turned off if the battery condition is OK when a user resets.

Output Functions	Comms Test	Code-46

This output will be turned on during a communicator test. It will normally be turned off after the programmed on time.

Output Functions	Fault	Code-47

This output will be turned on if any fault condition is present. It will be turned off when all faults clear. The fault output includes Watchdog fail, Mains fail, Line fault, Comm fail, Battery fault, Anti-mask alarm RX Jamming, TX Low Battery and TX Polling Fault and XiB fail when unset.

Output Functions	Rmt.Auth Fail	Code-48

This output will be turned on if a remote communication alarm occurs. A remote communication alarm is generated after 4 successive authentication failures (invalid authentication code from GuardStation Remote). No further remote log on attempts will be allowed for 4 hour period or until a user enters a PIN code on site. This feature complies with the BSIA downloading guidelines.

Output Functions	Sounder	Code-49

This output will only be on if the main PCB sounder output is triggered by events in the programmed set group.

Output Functions	Strobe	Code-50

This output will only be on if the main PCB strobe output is triggered by events in the programmed set group.

Output Functions	Audio	Code-51

This output will only be on if the main PCB audio output is triggered by events in the programmed set group.

Output Functions	Marginal	Code-52

This output will be turned on if any circuit is in a marginal state (circuits resistance exceeds the programmed warning threshold).

Output Functions	Off Hook	Code-53

This output is active while the dialler is off hook. The minimum dialler firmware version for this feature is SmartDial Super v2.97 or SmartDial Speech v4.15. This option may be used with any panel with an integrated dialler and the Dual Comm or PSTN module.

Output Functions	Comm OK	Code-54

A comm OK output will be turned on when a comm OK signal is received from a central station or GSR. This function must be programmed with an on time.

Output Functions	Cct Alm/Tam	*Code-57*

This output will be turned on when the programmed circuit number is in an alarm **or** tamper condition. The output will be turned off when the circuit alarm and/or tamper latch is reset.

Output Functions	Output Link	*Code-60*

This output will be active when the programmed output link number is active. Refer to the main edit menu, code 09, for details.

Output Menu	Set Group 0-max	*On/Off*

Some output functions may be programmed with a set group number.

Output Menu	Invert	*On/Off*

The output is normally positive applied. If the invert option is on, that output will become positive removed.

Output Menu	Output Link	*0-max Output Links*

This option only applies to output function programmed as Output Link (output type 60).

Output Menu	Set	*On/Off*

The output function can be programmed to operate when the programmed area(s) is set. This option only applies to the intruder, tamper, PA, Fire and alarm output functions.

Output Menu	Unset	*On/Off*

The output function can be programmed to operate when the programmed area(s) is unset. This option only applies to the intruder, tamper, PA, Fire and alarm output functions.

Output Menu	Delay	*0-255 units*

Each output can be programmed with a delay of up to 255 units. The units of time are also programmable. If the output is programmed with a delay then, if the output signal clears before the end of the programmed delay period, the output will not be triggered.

Output Menu	Cancel Delay	*On/Off*

If the event that starts a delay clears before the end of the programmed delay period then, if the cancel delay option is on, the delay will be cancelled and the output will not be activated. If the cancel delay option is off then the output will be activated at the end of the delay period even if the event is clear.

Output Menu	On Time	*0-255 units*

Each output can be programmed with an on time of up to 255 units. The units of time are also programmable. If the on time is non-zero then the output will be turned off at the end of the programmed on time, irrespective of the programmed TX reset option (Refer to reset options for details). If the on time is zero, then the output will follow the state of the programmed function in real time. A timed output will remain on until the end of the programmed time period even if the programmed output function event clears.

Output Menu	Cancel Timer	*On/Off*

If the event that starts a timer clears before the end of the programmed period then, if the cancel timer option is on, the timer will be cancelled and the output will be turned off. If the cancel timer option is off then the output will be turned off at the end of the timer period even if the event clears within the timer.

Output Menu	Units	*Units help menu*

Units Help Menu
1=Seconds 2=Minutes 3=Hours

The on and delay times can be programmed in seconds, minutes and hours. The selected units will apply to both on and delay times.

Output Menu	AND Logic	*On/Off*

Output functions with a set group option can be programmed with AND logic on or off (OR logic). If AND logic is on then all areas within a set group must apply. For example, if an output was programmed as Set with group 1 and group 1 included area 1 and area 2, then if AND logic was programmed the output will only be active if areas 1 & 2 are set. If AND logic is off the output will be active if either area 1 or area 2 is set.

Output Menu	Pulse	*On/Off*

If the pulse option is on then alternate activations of the programmed output function will turn on/off the output. The output function clearing will be ignored.

Output Menu	Count (PX250HS only]	*0-20*

If a count value is programmed for an output function then the output will only be active if the programmed count number is reached. For example, if an output function is programmed as circuit 1 status with a count of 3 then the output will only become active when the circuit changes state from clear to alarm for the third time. There is no time limit between the activations. The output function counter will be reset when the count limit is reached and a new cycle will then start.

Edit Mode	Output Map	*Code-08*

Each physical output in the system can be programmed with a **single** function. Any number of outputs may be programmed for the same function.

Output Map Menu
1=Panel OP 2=Conc OP 3=OPM 4=Keypad OP 5=Communicator

Output Map	Panel OP	*Code-1*

Any output function can be mapped to the sounder and strobe outputs. The default is 0 (normal strobe or sounder operation).

Panel Output Map	
Panel OP1-005	*0-max output functions (Only available on PX)*
OP2-008	*0-max output functions (Only available on PX)*
Strobe-000	*0-max output functions, 0 = normal strobe operation*
Sounder-000	*0-max output functions, 0 = normal sounder operation*

Output Map	Conc OP	*Code-2*

Conc Outputs	Options
Conc-n	*1-max concentrators*
OP1-00	*0-max outputs*
OP2-00	*0-max outputs*
OP3-00	*0-max outputs*
OP4-00	*0-max outputs*

Output Map	Keypad OP	*Code-3*

Keypad Outputs	Options
Keypad-n	*1-max keypads*
OP1-00	*0-max outputs*
LED-00	*0-max outputs*

Output Map	OPM	*Code-4*

Up to 8 output functions can be programmed on an output module.

OPM Outputs	Options
OPM-n	*1-max output modules*
OP1-00	*0-max outputs*
OP2-00	*0-max outputs*
OP3-00	*0-max outputs*
OP4-00	*0-max outputs*
OP5-00	*0-max outputs*
OP6-00	*0-max outputs*
OP7-00	*0-max outputs*
OP8-00	*0-max outputs*

Output Map	Communicator	*Code-5*

Communicator	Options
Communicator	
OP1-00	*0-max outputs*
OP2-00	*0-max outputs*
OP3-00	*0-max outputs*
OP4-00	*0-max outputs*
OP5-00	*0-max outputs*
OP6-00	*0-max outputs*
OP7-00	*0-max outputs*
OP8-00	*0-max outputs*

The communicator outputs are the 8 low current outputs (6 on RX16i/QX32i) available on the main PCB. These should be used to trigger 3rd part diallers and communicators.

Edit Mode	Output Link	Code-09

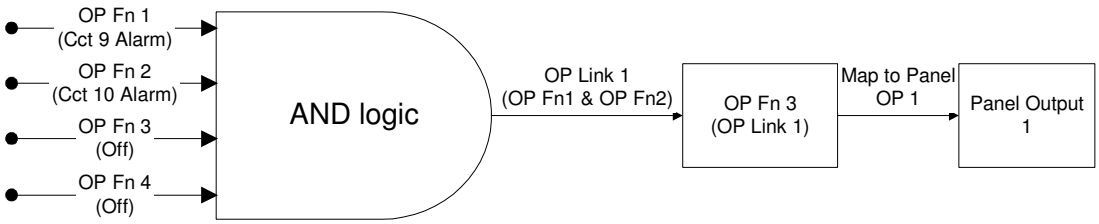
An output link can be used to link together up to 4 output functions to produce a combined response.

Output Link	Options
Output Link-n	*1-max output links*
OP1-00	*0-max output functions*
OP2-00	*0-max output functions*
OP3-00	*0-max output functions (Not RX16i)*
OP4-00	*0-max output functions (Not RX16i)*
OP5-00	*0-max output functions (PX250HS Only)*
OP6-00	*0-max output functions (PX250HS Only)*
OP7-00	*0-max output functions (PX250HS Only)*
OP8-00	*0-max output functions (PX250HS Only)*
OP9-00	*0-max output functions (PX250HS Only)*
OP10-00	*0-max output functions (PX250HS Only)*
AND Logic-Off	*On/Off*

Each of the outputs within a link are programmed in the normal way and may include invert, timed and logic options. There is no requirement to map the individual output function(s) used in an output link to a physical output but this can be done if required. The programmed output link can be mapped to a physical output and/or linked to other output links.

As an example consider how to program an output that is active for 10 seconds when circuits 9 and 10 are both active.

1. Select edit option 07, Output function and program output function 01 as circuit alarm (code 30) for circuit 9. Program output function 02 as circuit alarm (code 30) for circuit 10.
2. Program output function 03 as Output Link 1 (code 60) with an on time of 10 seconds.
3. Select edit option 09, Output Link, and program the Output Link 1 input 1 and 2 for output functions 1 and 2 respectively. There is no requirement to program the output 3 and output 4 of the output link. Program AND logic on. Output link 1 will now be active when circuits 9 & 10 are active.
4. Select edit option 08, Output Map, and program the required physical output for output link 1. The output link can be mapped to any number of physical outputs. As an example, choose option 1, panel outputs, and program output 1 for output function 3 (which was programmed as output link 1 in step 2).



Edit Mode	Comms	Code-10

Comms	Options
Comms Home Set-Off	*On/Off*
Auth Code-0	*0-255*
Call Repeat-00	*1-255*
Test Period-0	*0-255 Minutes*
Test Time-00:00	*HH:MM*
Test Set-Off	*On/Off*
Connect/Set-Off	*On/Off*
GSR Timeout	*0-255 Minutes*

Comms Menu	Home Set	On/Off

The panel can be programmed to only trigger the alarm communicator device when the system is set. If home set is on and the panel is part set then the panel will not trigger the alarm communicator device if a circuit alarm (Alarm types) or entry alarm occurs. Home set applies to all formats and communicator types.

Comms Menu	Auth Code	0-255

The panel can be programmed to authenticate all remote connections. The Auth Code is programmable in the range 0-255. The Auth Code is a seed code for a random PIN code generator. When an Auth Code is programmed then GuardStation™ and GSR Access will use a randomly generated 6-digit PIN code for each remote connection. By default the Auth Code is 0 which disables authentication. It is possible to use a non-zero Auth Code in GuardStation™ if the panel Auth Code is zero. This allows the chosen panel Auth Code to be downloaded to a defaulted panel. Once programmed you must ensure that the authentication code in GuardStation™ matches the programmed authentication code for the panel otherwise an authentication failure alarm will occur. If the authentication code is 0 then this will reduce the time the panel takes to make a connection and is useful if you are making a direct connection to GuardStation™.

Comms Menu	Call Repeat	1-255 minutes

The panel can be programmed for call repeat. If a call fails then any number programmed for repeat calls will be called at the programmed call repeat timer interval until the call is successful.

Comms Menu	Test Period	0-255 minutes

A programmable Comms test period has been added with a range 0-255 minutes. If this option is on then any programmed Comms test time is ignored. Enter a time of 0 to disable.

Comms Menu	Test Time	HH:MM

The dialler test time of day can be programmed. At this time a test call will be placed to all telephone numbers with the auto test option programmed. Program a time of 00:00 to disable all test calls.

Comms Menu	Test Set	On/Off

If this option is on then automatic comms test messages (time of day or interval testing) will only be transmitted if at least one area of the system is set.

Comms Menu	Connect/Set	On/Off

If the connect/set option is on then any configured GSR may connect when the panel is set.

Comms Menu	GSR Timeout	*0-255 minutes*

If the GSR timeout is programmed and no data is being exchanged between GSR and the control panel then the GSR session will be terminated by the control panel. This option should be used if there is a possibility of the GSR operator failing to end a connection. Selecting a time of 0 will disable the GSR Timeout feature.

Edit Mode	Tel Number	*Code-11*

This option will only be available if a dialler or Serial module is fitted to the system. For each telephone number there is a sub-menu of options.

Tel Number	Options
Tel Number-x	*x=Telephone number index*
Format-ADEMCO	*Alarm format help menu*
Module-SM 1	*Module type help menu*
"Tel Number"	*1-16 digits*
Data Number-0	*1-16 digits*
GSR-0	*0-max GSR*
Assist-Off	*On/Off*
Auto Test-Off	*On/Off*
Attempts-0	*0-5*
Backup-0	*0-max numbers*
Call Repeat-Off	*On/Off*
Alarm-Off	*On/Off*
Set/Uns-Off	*On/Off*
Bypass-Off	*On/Off*
Trouble-Off	*On/Off*
Log On-Off	*On/Off*
Eng On-Off	*On/Off*
Reset-Off	*On/Off*
Restore-Off	*On/Off*
Ch.1 Alarm-Off	*On/Off*
. . .	
Ch.8 Alarm-Off	*On/Off*
Ch.1 Restore-Off	*On/Off*
. . .	
Ch.8 Restore-Off	*On/Off*
Ch.1 Op/Cl-Off	*On/Off*
. . .	
Ch.8 Op/Cl-Off	*On/Off*

Tel Number Menu	Format	*Alarm format help menu*

The speech format can only be used if a speech module is fitted to the system. The SMS format is only available if a Dual comm or GSM module is fitted to the system.

Alarm Format Help
0=Off
1=ADEMCO
2=Superfast
3=Point ID
4=Guardall
5=Home Beep
7=Speech
9=SIA
12=SMS

Tel Number Formats	ADEMCO	*Code-1*

The ADEMCO channel signals are the same as the 8 main PCB TX channels, and are programmed through output mapping. The PX panel also supports open/close and restore channels.

Tel Number Formats	Superfast	*Code-2*

Superfast is a variant of ADEMCO and also offers 8 channels of data. A Superfast transmission to the central station will be shorter and hence faster than a standard ADEMCO transmission.

Tel Number Formats	Point ID	*Code-3*

Point ID uses the same type of protocol as ADEMCO, but sends three-digit numerical alarm codes rather than just eight on/off states. See “Point ID, SIA and Guardall Formats” table below.

Tel Number Formats	Guardall	*Code-4*

The Guardall format can be used for alarm reporting and panel management in conjunction with the Guardall GSR PC software. Alarm reporting in the Guardall format is similar to SIA level 3 and includes the event text descriptors were appropriate.

Tel Number Formats	Home Beep	*Code-5*

This format can be used on any panel with an integrated dialler, in a system that is fitted with a SmartDial v3.01 or later or a Dual comm/PSTN module. The home beep format allows tone messages to be sent to a telephone. An alarm in the home beep format is transmitted as a series of DTMF tones. For example if channel 3 was active the transmitted message would be:

3 3 3 < 2s delay> 3 3 3 < 2s delay > 3 3 3 < 2s delay> 3 3 3 < 2s delay >3 3 3

Where ‘3’ is the tone pair for DTMF digit 3. The channel information is repeated a maximum of 5 times during a call. An authorised user may change a telephone number programmed with this format.

Tel Number Formats	Speech	*Code-7*

The Speech format may be used on a system with a Speech dialler fitted, or a Speech module or an audio bus interface with speech capability. The Speech format allows speech messages to be sent to a telephone. Refer to the user manual for full details. An authorised user may change a telephone number programmed with this format.

Tel Number Formats	SIA	*Code-9*

SIA uses a 300 baud FSK protocol, and is by far the most sophisticated of the (non-Guardall) alarm formats, able to be operated at a number of 'levels'. It sends an alarm type as a two-character code (e.g. 'BA' for burglary alarm), plus an ASCII string. SIA level 3 supported. See “Point ID, SIA and Guardall Formats” table below.

Tel Number Formats	SMS	*Code-12*

The SMS format can only be used if a GSM module or Dual Comm module is fitted to the system. The message format is:

<Site ID><Company Name><Event index><Event data>

The event data format is the same as a printed log message, and includes the time and date.

Tel Number Formats **Point ID, SIA and Guardall Formats**

Event Type	Point ID Event Code	Point ID Qualifier	SIA Event Code	Area No[1].	Sensor No.	Category
Fire	110	Event	FA	Area 0-max	Circuit number	Alarm
PA	122	Event	PA	Area 0-max	Circuit number	Alarm
Cct Alarm	130	Event	BA	Area 0-max	Circuit number	Alarm
24 Hour	133	Event	QA	Area 0-max	Circuit number	Alarm
Entry/exit	134	Event	CT	Area 0-max	Circuit number	Alarm
Rest. Entry/exit	134	Event	BR	Area 0-max	Circuit number	Alarm
Cct Tamper	137	Event	TA	Area 0-max	Circuit number	Alarm
Control Tamper	137	Event	TA	0	0	Alarm
Sounder Tamper	137	Event	TA	0	0	Alarm
Verified Alarm	139	Event	BV	Area 0-max	0	Alarm
Auth. Fail	140	Event	RD	0	0	Alarm
Conc Tamper	145	Event	TA	0	Conc. number	Alarm
Keypad Tamper	146	Event	TA	0	Keypad number	Alarm
Output Module Tamper	147	Event	TA	0	Module number	Alarm
Audio Module Tamper	149	Event	TA	0	Module number	Alarm
Serial Module/dialler Tamper	148	Event	TA	0	Serial module number	Alarm
Access Module Tamper	145	Event	TA	0	Serial module number	Alarm
GSM Module Tamper	148	Event	TA	0	Serial module number	Alarm
Technical Alarm	150	Event	ZA	Area 0-max	Circuit number	Alarm
Anti-mask Alarm	149	Event	AM	Area 0-max	Circuit number	Alarm
Alarm Abort	406	Event	BC	0	User number	Alarm
Detector Fault	149	Event	AM	Area 0-max	Circuit number	Alarm
Tamper	151	E	XS	0	RM Number	Alarm
Not Unset alarm	410	Event	CT	Area 0-max	0	Alarm
AC Loss	301	Event	AT	0	0	Trouble
AC Restore	301	Event	AR	0	0	Trouble
Access Module Fault	617	Event	ET	0	AM Number	Trouble
Audio Module Fault	617	Event	ET	0	Audio Number	Trouble
Bat. Test Fail	309	Event	YT	0	0	Trouble
Battery Low	155	Event	XT	0	TX Number	Trouble
Conc Fault	617	Event	ET	0	Conc Number	Trouble
Fault	149	Event	AM	Area 0-max	Circuit number	Trouble
GSR Poll Fail	619	Event	YS	0	GSR number	Trouble
Rad. TX Jam	156	Event	XQ	0	RM Number	Trouble
Rad. RX Jam	156	Event	TA	0	RM Number	Trouble
Keypad Lockout	330	Event	JA	0	Keypad number	Trouble
KP Fault	617	Event	ET	0	KP Number	Trouble
Line Fault	351	Event	YC	0	1-5[2]	Trouble
Low Battery	302	Event	YP	0	0	Trouble
Marginal	138	Event	AS	0	Circuit number	Trouble
OPM Fault	617	Event	ET	0	OPM Number	Trouble
Poll Fail	152	Event	XP	0	RM Number	Trouble

[1] If the circuit is programmed for system the group number will be 0.

[2] The line fault message includes a parameter which determines the type of fault:

1 - 50 volts not present
2 - Line block test failure
3 - No acknowledge from central station
4 - Main PCB LF input
5- SmartDial Fault

Event Type	Point ID Event Code	Point ID Qualifier	SIA Event Code	Area No[1].	Sensor No.	Category
Poll Fail	153	Event	XV	0	TX Number	Trouble
Radio Module Fault	617	E	ET	0	RM Number	Trouble
Serial Module Fault	617	Event	ET	0	SM Number	Trouble
Set	401	Restore	CL	Area 0-max	User number	Set/Unset
Unset	401	Event	OP	Area 0-max	User number	Set/Unset
Auto Set Fail	455	Event	CI	Area 0-max	0	Set/Unset
Auto Set Fault	456	Event	CI	Area 0-max	0	Set/Unset
Cct Bypass on	570	Event	UB	0	Circuit number	Bypass
Cct Bypass off	570	Restore	UU	0	Circuit number	Bypass
Temp Bypass	570	Event	UB	0	Circuit number	Bypass
Isolate Cct on	570	Event	UB	0	Circuit number	Bypass
Isolate Cct off	570	Restore	UU	0	Circuit number	Bypass
Isolate Conc on	570	Event	UB	0	Conc. number	Bypass
Isolate Conc off	570	Restore	UU	0	Conc. number	Bypass
Engineer Log On	610	Event	LB	0	User 1	Eng On
Engineer Log Off	610	Restore	LX	0	User 1	Eng On
GuardStation User On	611	Event	RB	0	User 0	Eng On
User Logged On						Log On
First Code						Log On
Reset	305	Event	OR	Area 0-max	User	Reset
AC Restore	301	Restore	AR	0	0	Restore
Access module tamper restore	145	Restore	XR	0	AM number	Restore
Audio module tamper restore	149	Restore	XR	0	Audio Module number	Restore
Battery Restore	309	Restore	XR	0	0	Restore
Cct tamper restore	137	Restore	XR	Area 0-max	Circuit number	Restore
Cct. Alm. Restore	As Event Type	Restore	BR	Area 0-max	Circuit number	Restore
Conc tamper restore	145	Restore	XR	0	Conc number	Restore
Control panel tamper restore	137	Restore	XR	0	0	Restore
GSM module restore	148	Restore	XR	0	0	Restore
KP tamper restore	146	Restore	XR	0	KP number	Restore
Line fault restore	351	Restore	XR	0	0	Restore
OPM tamper restore	147	Restore	XR	0	OPM number	Restore
PA Alarm Restore	122	Restore	PR	Area 0-max	Circuit number	Restore
Radio Module tamper restore	151	Restore	XR	0	RM number	Restore
Serial module tamper restore	148	Restore	XR	0	SM number	Restore
Jamming Clear	156	Restore	XQ	0	RM Number	Restore
GSR Poll Rest.	619	Restore	YK	0	GSR number	Restore
Sounder tamper restore	137	Restore	XR	0	0	Restore
Test call	601	Event	TX	0	User	---

Tel Number Menu	Module	*Module Type help menu*

Module Menu	Options
0=SM 0 **1=SM 1**	*Not PX500/PX250HS, on board serial module*
2=SM 2	
3=Int.Dlr.	*The on board dialler*
4=Ext.Dlr.	*The external dialler (for example, a GSM module)*

Tel Number Menu	Tel Number	*1-16 digits*

A telephone number of up to 16 digits can be programmed. This number can include pause digits. Pause digits can be entered using the ↓ button. This will be displayed as a "," character. Each pause digit represents a 1 second delay. Pauses may be required if you are signalling via a PABX or if the call is routed through an old exchange. **Enter a single zero to turn off a telephone number. To delete a telephone number digit press the ✗ button.**

Tel Number Menu	Data Number	*1-16 digits*

If the telephone number module is programmed as a dialler then a data number of up to 16 digits can be programmed. The data number will be used for GSM data calls. If no data number is programmed then the normal telephone number will be used for GSM data calls. This option allows a Windsor modem to be used for PSTN calls and a GSM modem to be used for GSM data calls to GSR. When entering the data number use the ↑ button to insert "." character. **Enter a single zero to turn off a data number. To delete a data telephone number digit press the ✗ button.**

Tel Number Menu	GSR	*0-max GSR*

A telephone number can be programmed for use with GSR. This number will be used to call back the programmed GSR number, config read/write and automatically uploading the event log. If more than one telephone number is programmed with the same GSR number, then the first one will be used (i.e. the lowest telephone number).

Tel Number Menu	Assist	*On/Off*

If this option is programmed a user may initiate an Assist call to GSR on this telephone number.

Tel Number Menu	Auto Test	*On/Off*

Any telephone number can be programmed for automatic dialler test (refer to the main comms options for details.) When enabled a test call will be initiated at the programmed test time or at the programmed test interval.

Tel Number Menu	Attempts	*0-5*

The number of consecutive call attempts to the programmed number is programmable. Enter a zero to use the pre-defined call attempts (see below). This option does not apply when using SmartDial Super

Attempts	Call Pattern

The call pattern for all communications using a dialler, programmed with the UK country code, is shown in the table.

Attempt Number	Number Dialled	Gap Between Attempts
1	Primary	----------
2	Primary	5 seconds
3	Primary	1 minute
4	Secondary	5 seconds
5	Secondary	5 seconds
6	Secondary	1 minute

If the same telephone number is programmed for the secondary this effectively increases the call attempts to 6.

Tel Number Menu	Backup	*0-max numbers*

The programmed number can be configured as a backup for any primary number. The backup number is only used if the call to the primary fails and only after all programmed primary numbers are called.

Tel Number Menu	Call Repeat	*On/Off*

Each telephone number can be programmed to do repeat calls in the event of a failure to communicate. See also the call repeat timer. When enabled the number will be called at the programmed interval.

Tel Number Menu	Alarm Report Categories

The alarm report options will only be available if a dialler or Serial module is fitted to the system. The alarm report categories can be programmed for each area. The report categories apply when using the Guardall or point ID formats. Refer to the alarm report categories in the event code table in the telephone number programming section of this manual for full details.

Tel Number Menu	Alarm Channels

This option will only be available if a dialler or Serial module is fitted to the system. This is an ADEMCO or superfast reporting option. Each of the 8 channels can be individually programmed for alarm signalling.

Tel Number Menu	Restore Channels

This option will only be available if a dialler or Serial module is fitted to the system. This is an ADEMCO or superfast reporting option. Each of the 8 channels can be programmed for restore. If the programmed channel status changes from alarm to clear then an restore code will be transmitted. The restore option will be ignored if it is programmed for a channel with open/close also programmed.

Tel Number Menu	Open/Close Channels

This option will only be available if a dialler or Serial module is fitted to the system. This is an ADEMCO or superfast reporting option. Each of the 8 channels can be programmed for open/close. If the programmed channel status is alarm, a close code will be reported. If the programmed channel status is clear, an open code will be reported.

Edit Mode	GSR	*Code-12*

This option will only be available if a dialler or Serial module is fitted to the system. For each GSR there is a sub-menu of options. The remote communications options are only available when using the Guardall format.

1. A security log and access log index will be maintained for all GSRs.

The Serial Module communication option is selected using option switches. Refer to the installation manual for details.

GSR	Security

GuardStation™ remote communications offers several types of security:

1. The GuardStation™ software is protected by a hardware dongle.
2. Each GuardStation™ user has a programmable name and passcode.
3. Each remote option is configurable for each GuardStation™ user.
4. Each remote option is configurable for each panel.
5. Each panel can have an authentication code configured.
6. Call back may be programmed.

Up to 4 GSRs can be individually programmed. When the GSR number is entered then GSR menu is displayed.

GSR	Options
GSR-x	*1-max GSR*
Enable-Auto	*Off/User/Auto*
S/N-00000000	*the GSR serial number (10 digits maximum)*
GSR ID-0	*1-8 digits*
IP Addr.-0	*15 digits, Press help to display the full IP address*
Call Back-Off	*On/Off*
Reset-Off	*On/Off*
Unset-Off	*On/Off*
Code-Off	*On/Off*
Clock-Off	*On/Off*
Byp/Isol-Off	*On/Off*
Soak-Off	*On/Off*
Log-Off	*On/Off*
ConfigRD-Off	*On/Off*
ConfigWR-Off	*On/Off*
PINs RW-Off	*On/Off*
A.log Upload-000	*0-200 events, 0 = disable*
Exit Time-001	*0-255 seconds*
KP Message-On	*On/Off*
Virtual KP-On	*On/Off*
Poll Time-0	*0-255 minutes*
Encryption-Off	*On/Off (PX250HS only)*

GSR	Enable	*Enable help menu*

Enable Help
0=Off
1=User
2=Auto

If this option is off then GuardStation™ cannot log onto the panel. If User is programmed then an authorised user must enter a code and select the Engineer option before GuardStation™ can log onto the panel. The Auto option allows GuardStation™ unrestricted access.

GSR	S/N	*1-10 digits*

Each GSR used for remote communications is supplied with a security dongle, which is programmed with a unique serial number (S/N). The GSR serial number is used in all GSR communications and enables the control panel to identify the GSR. This offers greater security and allows the installer to individually program the options for each GSR that can communicate with the control panel.

The default S/N is "00000000" and only allows a GSR direct connection. It is recommended that as a security precaution the GSR Enable option be turned off if GSR is not used.

GSR	GSR ID	*1-8 digits*

Each GSR can be programmed with a identification number of up to 8 digits. The GSR ID uniquely identifies the panel and is used in all GSR communications.

GSR	IP Addr	*1-15 digits*

The IP address option will only be displayed if an Ethernet module has been programmed. To display the full IP address press the help button

GSR	Call Back	*On/Off*

If the call back option is on then, when a call is received, the panel will call back the GSR on the programmed telephone number (refer to the telephone number section for details).

GSR	Reset	*On/Off*

If this option is on a GSR operator with reset authority will be allowed to reset alarms.

GSR	Unset	*On/Off*

If this option is on a GSR operator with unset authority will be allowed to unset any set group. Setting from GSR is always allowed if the GSR operator has set authority.

GSR	Code	*On/Off*

If this option is on a GSR operator with code authority will be allowed to change user codes.

GSR	Clock	*On/Off*

If this option is on a GSR operator with clock authority will be allowed to set the panel clock (time and date).

GSR	Byp/Isol	*On/Off*

If this option is on a GSR operator with bypass authority will be allowed to bypass circuits and a GSR operator with isolate authority will be allowed to isolate circuits.

GSR	Soak	*On/Off*

If this option is on a GSR operator with soak authority will be allowed to put circuits on soak test.

GSR	Log	*On/Off*

If this option is on a GSR operator with "view/upload security events" authority will be allowed to upload the event log and a GSR operator with "view/upload access events" authority will be allowed to upload the access log.

GSR	ConfigRD	*On/Off*

If this option is on a GSR operator with read/write configuration authority will be allowed to upload the panel configuration.

GSR	ConfigWR	*On/Off*

If this option is on a GSR operator with read/write configuration authority will be allowed to download the panel configuration.

GSR	PINs RW	*On/Off*

If this option is on a GSR operator with read/write configuration authority will be allowed to upload the user PINs/codes if the configRD option is on and a GSR operator with read/write configuration authority will be allowed to download the user PINs/codes if the configWR option is on

GSR	A.Log Upload	*0-200 events*

Normally the event log is uploaded to GuardStation™ manually. If the A.Log Upload option is on, when the number of logged events reaches the A.Log Upload level, the events will be uploaded and stored by GuardStation™ automatically using the previously programmed engineering number (a telephone number with the GSR option enabled).

GSR	Exit Time	*0-255 seconds*

The GSR Exit Time will determine the set mode that is used when setting from GuardStation™.

GSR	KP Message	*On/Off*

GuardStation™ can be used to send messages to the on site keypads if the KP message option is on. This message will replace the normal time, date and company name display when no user is logged on the keypad. The keypad message can be cancelled by logging onto a keypad.

GSR	Virtual KP	*On/Off*

If the Virtual KP option is on then active keypads can be displayed and controlled using GSR. An active keypad is a keypad with a user logged on.

GSR	Poll Time	*0-255 minutes*

The panel can be programmed to monitor the GSR polling. If the panel is being polled then the poll time is the maximum allowed period between polls. If no poll message is received within the poll time a polling fault will be logged and optionally signalled.

GSR	Encryption (PX250HS Only)	*On/Off*

If this option is on then all GSR communications will be encrypted.
This option will only be displayed if GSR has not yet programmed the panel for HS encryption.

Edit Mode	Module	Code-13

Each communicator in the system can be individually programmed.

Module Menu	Options
0=SM 0 **1=SM 1**	*RX, QX and PX48i/PX80i only (integrated serial module)*
2=SM 2	
3=Int.Dlr.	*The on board dialler*
4=Ext.Dlr.	*The external dialler (for example, a GSM module)*
5=3rdPartyComm	

Select the communicator from the module menu to display the communicator options.

Module	SM 0/1/2	Code-0,1,2

SM 0/1/2	Options
SM x	*x = the serial module number*
Type-Serial	*Press ? for a list of options*
Basic-Off	*On/Off*
Baud-9600	*Press ? for a list of options (1200, 9600, 38400 & 115200)*
Lnft Enable-000	*0-255 seconds*
Lnft Set-Off	*On/Off*
Lnft Warn-Off	*On/Off*
RealTime Log-Off	*On/Off*
Access Log-Off	*On/Off*

SM Menu	Type	Help options

Type Options	
0=Off **1=Serial**	
2=Printer	
3=Ethernet	
4=Radio	*This option is only available in the RX16i and QX32i, SM0.*
9=Comms Test	

If an internal Visonic radio module is used in the R16i or QX32i then serial module 0 must be programmed for radio. If the internal radio module is enabled then external radio modules must not be connected to the system.

SM Menu	Basic	On/Off

When switched “On” it prevents the panel from sending the GSR versus IP Address table to the Datacomms module. A version 1.02 Datacomms module will operate without this table in the way that the older Datacomms modules did - accepting a GSR session from any IP address, but only accepting one session.

Note: The Datacomms module will need to be repowered after "Basic" has been switched on, otherwise it will still have the GSRvsIP table to use.

SM Menu	Lnft Set	On/Off

The panel can be programmed to allow setting with a line fault present. This option includes line fault and comm fail conditions.

SM Menu	Lnft Warn	*On/Off*

The normal line fault response includes an audible warning when unset. The audible response can be disabled using the Lnft Warn option. Only one audible warning will be given when the panel is unset.

From v4.30, the line fault option also applies to communication failures.

SM Menu	Lnft Enable	*0-255 seconds*

The line fault delay period can be up to 255 seconds. If a value of 0 is programmed then line faults will not be recognised.

SM Menu	RealTime Log	*On/Off*

Program this option on to print the event log in real time to the serial module.

SM Menu	Access Log	*On/Off*

Program this option on to print the access log in real time to the serial module.

Module	Dialler	*Code-3 or 4*

Dialler	Options
Dialler Type-GSM+PSTN	*Internal or external dialler* *Press ? for a list of options. GSM available on external dialler only.*
Lnft Set-Off	*On/Off*
Lnft Warn-Off	*On/Off*
Lnft Enable-30	*0-255 seconds*
Line Block-Off	*On/Off*
Handset-On	*On/Off*
Blind Dial-Off	*On/Off*
ISDN Check-Off	*On/Off*
Recall-On	*On/Off*
Remote Msg.-Off	*On/Off*
Speech Ack-Off	*On/Off*
Audio Unset-Off	*On/Off*
Country Code-44	*000-999*
Ring Count-2	*1-20*
Dble.Call-000	*0-255 seconds*
Route 1-Off	*Press ? for a list of options, only available if dialler type is GSM*
Route 2-Off	*Press ? for a list of options, only available if dialler type is GSM*
Route 3-Off	*Press ? for a list of options, only available if dialler type is GSM*

Dialler Menu	Type	*On/Off*

Type Options
0=Off
1=GSM+PSTN

On board dialler, SmartDial, PSTN module or GSM or Dual Comm module. GSM available on external dialler only.

Dialler Menu	Lnft Set	*On/Off*

The panel can be programmed to allow setting with a line fault present. This option includes line fault and comm fail conditions

Dialler Menu	Lnft Warn	*On/Off*

The normal line fault response includes an audible warning when unset. The audible response can be disabled using the Lnft Warn option. Only one audible warning will be given when the panel is unset.

From v4.30, the line fault option also applies to communication failures.

Dialler Menu	Lnft Enable	*0-255 seconds*

Normally a line fault must be present for 30 seconds before a line fault is recognised by the control panel. This delay period can be up to 255 seconds. If a value of 0 is programmed then line faults will not be recognised. Line fault disabling is only recommended in installations where the communicator is sharing a telephone line with other equipment which may be in use for more than the maximum line fault delay (see also the handset option).

Dialler Menu	Line Block	*On/Off*

This option only applies if a SmartDial Super, SmartDial Speech PX or a Dual comm/PSTN module is being used. If this option is on the communicator will periodically check the line.

Dialler Menu	Handset	*On/Off*

This option only applies if a SmartDial Super, SmartDial Speech PX or a Dual comm/PSTN module is being used. If you intend sharing the telephone line with a telephone handset, you must program the handset option to suspend normal line condition monitoring. Even if the handset option is on, line faults will be recognised if the panel is fully set (see also the Lnft enable option).

Dialler Menu	Blind Dial	*On/Off*

Normally the communicator will only dial if a valid dial tone is detected. In some circumstances, such as dialling through a PABX or where the telephone exchange tones are not reliable, it may be necessary to program the communicator to dial without recognising a dial tone. Enable this option to stop the dialler waiting for a dial tone before dialling. If blind dial is programmed an automatic 2-second dial delay is inserted at the start of all telephone numbers. This will prevent the dialler from dialling before a connection is made to the exchange.

Dialler Menu	ISDN Check	*On/Off*

If the dialler is connected to an ISDN line (analogue port) and line check is required, then this option must be on. The line will be checked every 30 minutes. This option operates with the SmartDial Speech PX, SmartDial Super version 2.93 or later or a Dual comm/PSTN module.

Dialler Menu	Recall	*On/Off*

In some countries the PTT offers a facility for requesting a new exchange connection if no dial tone is detected. In the UK this is referred to as Timed Break Recall (or Star Services). In countries were there is no such service or the recall facility is not used for the same purpose, the Recall option can be turned off. Refer to the communicator manual for more details.

Dialler Menu	Remote Msg	*On/Off*

The remote message option only applies if a speech module is fitted to the system. Normally the recorded messages can be modified from a remote handset. If the remote message option is off then messages can only be recorded locally.

Dialler Menu	Speech Ack	*On/Off*

The speech acknowledge option only applies if a speech module is fitted to the system. If the Speech Ack option is off then dialler will call all programmed primary numbers. If the Speech Ack option is on, and a user acknowledges a call, then the dialler will stop sending the current message and will not attempt to call the remaining programmed numbers.

Dialler Menu	Audio Unset	*On/Off*

This option only applies if audio modules are fitted to the system. Normally the audio commands are only available to a user if an authorised area is set. If the Audio Unset option is enabled then a user can access the audio commands (listen/talk) when all of the authorised areas are unset.

Dialler Menu	Country Code	*000-999*

By default the panel is programmed with the UK country code (44). For operation outside the UK the correct country code must be programmed. If the programmed country code is not supported the dialler will default to use the TBR21 settings. The dialler supports the following countries:

- United Kingdom
- The Netherlands
- Italy
- France
- Ireland
- Belgium
- Finland
- South Africa
- Australia

Dialler Menu	Ring Count	*1-20*

The panel will answer an incoming call after the programmed number of rings. The ring count range is 1-20. Please ensure that the country code option in the comms menu is set correctly to ensure that the ring signal is accurately detected.

Dialler Menu	Dble.Call	*0-255 seconds*

If the panel engineering communication device is sharing a line with another automatic answering device (such as an answer phone) then the ring count for the other device should be lower than the panel ring count. If programmed in this way the panel will not answer the first call but if a second call attempt is made within the programmed double call period, the panel will answer the call on the first ring. The double call period can be programmed in the range 0-255 seconds. Double call must also be enabled on GuardStation™. This facility is often referred to as answerphone defeat or fax defeat.

Dialler Menu	Route1-3	*Route type help menu*

The route options determine the reporting priority when using a Dual Comm module or GSM module. The priority sequence is Route 1, Route 2 and then Route 3.

Route Type	
0=Off **1=PSTN** **2=GSM** **3=GSM Data**	*this option is only used for Guardall format events*

The following table shows the routes that are available for each Alarm Format.

Alarm Format	Routes that can be used
ADEMCO	PSTN, GSM
Superfast	PSTN, GSM
Point ID	PSTN, GSM
Guardall	PSTN, GSM Data*
Home Beep	PSTN, GSM
..	..
Speech	PSTN, GSM
..	..
SIA	PSTN, GSM
CESA	PSTN, GSM
Protection One	PSTN, GSM
SMS	GSM Data

**If the PC running GSR is fitted with a GSM modem then the GSM Data option can be used.*

For example, to send all calls over PSTN, and only use GSM as a backup if the telephone line is not available, program Route 1 as PSTN and Route 2 as GSM.

Note that any routes a dialler cannot use will be automatically ignored. e.g. if a GSM-only dialler is fitted the PSTN route will be ignored.

Module	**3rdPartyComm**	***Code-5***

These options apply to the line fault and comm fail inputs on the main PCB.

3rdPartyComm	**Options**
3rdPartyComm Lnt Enable-000	*0-255 seconds*
Lnft Set-Off	*On/Off*
Lnft Warn-Off	*On/Off*

3rdPartyComm Menu	**Lnft Enable**	***0-255 seconds***

The line fault delay period can be up to 255 seconds. If a value of 0 is programmed then line faults will not be recognised.

3rdPartyComm Menu	**Lnft Set**	***On/Off***

The panel can be programmed to allow setting with a line fault present. This option includes line fault and comm fail conditions

3rdPartyComm Menu	**Lnft Warn**	***On/Off***

The normal line fault response includes an audible warning when unset. The audible response can be disabled using the Lnft Warn option. Only one audible warning will be given when the panel is unset.

Edit Mode	Verify Alarm	Code-14

PX v1.20 or later fully complies with DD243:2002. A verifiable event includes any combination of two of the following events:

- Circuit alarm
- PA alarm
- Any source of tamper
- A line fault

An event will only be confirmed if it is in a set area. If system verification is programmed then verification will only occur if the system is set. Each type of verifiable event is programmable. An ER circuit may also be programmed to start an entry if the final exit circuit is auto bypassed at the end of the verification period. Areas with a single un-verified event are cleared when setting. In addition to the verify options, to comply with DD243:2002, the following options must also be on:

- Circuit verify and auto reset options
- Reset/auto reset

Verify Alarm	Options
Verify Alarm Type-System	*System or Area*
Duration-30	*0-60 minutes*
Sounder-On	*On/Off*
Tamper-Off	*On/Off*
Line Fault-On	*On/Off*
Entry Cancel-Off	*On/Off*
Strobe-On	*On/Off*
Eng Rst-Off	*On/Off*
Entry ACE-Off	*On/Off*
ER No Conf.-Off	*On/Off*

Verify Alarm Menu	Type	Verify Help Menu

The panel can be programmed to confirm alarms from any verified circuit in the system or only confirm alarms from another circuit in the same area.

Verify Help Menu

1=System
2=Areas
3=Off

If system is selected then an alarm will be verified by any other circuit in the system. If areas is selected then an alarm will be verified only by another circuit in the same area. If the verify type is off then verification will be disabled.

Verify Alarm Menu	Duration	0-60 minutes

The verified alarm duration is the maximum time between the first circuit to alarm and the confirming circuit alarm. If a duration of 000 is programmed then the verification period will be until either the area or system is set or unset. If an alarm event has not been confirmed by the end of the programmed verification period then the engineer reset requirement will be cleared. If the first alarm has not cleared and has not been confirmed by the end of the verify alarm period then the circuit will be bypassed (the circuit must have the bypass option enabled to use this feature). The verification timer will be paused when an entry timer starts in an area that has had an unconfirmed alarm.

Verify Alarm Menu	Sounder	*On/Off*

If the sounder option is off the first non-verified alarm will be silent.

Verify Alarm Menu	Tamper	*On/Off*

Tamper alarms may be programmed as verifiable. Tamper alarms are not verified if the system is unset

Verify Alarm Menu	Line Fault	*On/Off*

Line faults may be programmed as verifiable.

Verify Alarm Menu	Entry Cancel	*On/Off*

If the entry cancel option is on then verification will be cancelled at the start of the entry time.

Verify Alarm Menu	Strobe	*On/Off*

If the strobe option is on then the strobe will only be triggered if an alarm is verified. The strobe may still be tested in the normal way.

Verify Alarm Menu	Eng Rst	*On/Off*

If the Eng Rst option is on then an engineer reset is only required for confirmed events.
Note: An entry alarm is a never a verified event and will always require an engineer reset if the engineer NA reset option is enabled.

Verify Alarm Menu	Entry ACE	*On/Off*

If the Entry ACE option is on then during the entry time a user can only log on using a proximity token (a PIN code is not allowed).

Verify Alarm Menu	ER No Conf.	*On/Off*

If the ER No Confirm option is on then, after the start of an area entry time, all area ER circuits will not be used for confirmation.

Edit Mode	Alarm Rpt	Code-15

This option will only be available if a communicator is programmed. The alarm report categories can be programmed for each area.

Alarm Rpt	Options
Area-n	*n=the area number*
Alarm-Off	*On/Off*
Set/Uns-Off	*On/Off*
Bypass-Off	*On/Off*
Trouble-Off	*On/Off*
Log On-Off	*On/Off*
Eng On-Off	*On/Off*
Reset-Off	*On/Off*
Restore-Off	*On/Off*

These reporting categories apply when using the Guardall, SIA or point ID formats.
For more details, refer to the alarm report categories in the event code table in the telephone number programming section of this manual.

Edit Mode	Log Filter (PX Only)	Code-16

The type of events that are logged can be programmed using the Log Filter option. Log filter options can be programmed for each area.

Log Filter	Options
Area-x	*The events for each area are separately programmed.*
Alarm-On	*On/Off*
Set/Uns-On	*On/Off*
Bypass-On	*On/Off*
Trouble-On	*On/Off*
Log On-On	*On/Off*
Eng On-On	*On/Off*
Reset-On	*On/Off*
Restore-On	*On/Off*

Edit Mode	Concentrator	Code-17

A 10 character concentrator descriptor can be programmed. The concentrator descriptor is used in the log and in check mode.

Concentrator	Options
Conc 1	*1-max concs*
"Conc Descriptor"	*Press enter to edit, 10 characters maximum*
EOL-A(8k2) T(8k2)	*Press ? for a list of the EOL types supported*
Bat.1(Ah)-17	*0-18*
Bat.2(Ah)-0	*0-18*

Concentrator Options	EOL	EOL Resistance help menu

The Alarm and Tamper EOL values can be programmed. This feature allows the system to interface to existing sensors that do not use the preferred Guardall EOL value. Please refer to the installation manual for details of the EOL wiring arrangement.

EOL Help Options	EOL Values
1=A(8k2)T(8k2)	*Type 1 Network (Standard PX)*
2=A(2k7)T(8k2)	*Type 1 Network*
3=A(1k0)T(1k0)	*Type 2 Network*
4=A(4k7)T(2k2)	*Type 2 Network*
5=A(4k7)T(4k7)	*Type 2 Network*
6=A(3k9)T(8k2)	*Type 1 Network*
7=A(2k2)T(2k2)	*Type 2 Network*
8=A(5k6)T(5k6)	*Type 2 Network*
9=A(10k)T(10k)	*Type 1 Network*
10=A(3k3)T(3k3)	*Type 2 Network*
11=A(6k8) T(4k7)	*Type 2 Network*
12=No EOL	*No EOL resistor fitted.*

Note: the concentrator 'No EOL' option is only for use with the DGN interface (W76210).

Individual Circuits with no EOL resistors can still be programmed individually, within the normal 'Circuit' programming menu.

Concentrator Options	**Bat.1**	***0-18***

This option is used to specify the size of the 3A Smart Concentrator battery 1.

Concentrator Options	**Bat.2**	***0-18***

This option is used to specify the size of the 3A Smart Concentrator battery 2. If battery 2 is not fitted then enter a value of 0.

Edit Mode	**Schedule**	***Code-18***

A schedule can be used to:

1. Auto set and unset parts of the system
2. Control outputs
3. Enable/disable keypads
4. Enable/disable user access
5. Automatically lock/unlock ACM doors

To program a schedule, select the schedule option from the main menu followed by the schedule number. The day menu will then be displayed.

Schedule	Options
1=Mon	
2=Tue	
3=Wed	
4=Thu	
5=Fri	
6=Sat	
7=Sun	
8=Hol	

Select the day or holiday (Hol) to program the schedule times:

Schedule	Options
Schedule-nn *Day*	*nn=Schedule number, Day= selected day or holiday*
Start 1-00:00	*HH:MM*
Stop 1-00:00	*HH:MM*
Start 2-00:00	*HH:MM*
Stop 2-00:00	*HH:MM*

Two sets of times may be programmed for each schedule day. This allows, for example, 2 access periods to be configured for a user or 2 auto set/unset times.

Edit Mode	Holiday (not RX16i)	*Code-19*

This option is used in conjunction with the programmable schedules. To program a holiday, select the holiday option from the main menu followed by the holiday number. The holiday menu will then be displayed.

Holiday	Options
Holiday-x	*x=holiday number*
Start-*DD:MM*	*DD:MM*
End-*DD:MM*	*DD:MM*
Schedule-0	*0–Max Schedules*

Note: The holiday date format is day and month only. No year is entered therefore the entered date will remain programmed as a holiday for all subsequent years, or until it is removed from the holiday schedule. It is not possible to program a holiday period that starts in December and ends in January. To achieve this 2 holiday periods must be programmed.

Holiday Menu	Start	*DD:MM*

Enter the holiday start day and month. To disable a holiday enter a date of 00:00. The date entered must be before the programmed end date.

Holiday Menu	End	*DD:MM*

Enter the holiday end day and month. To disable a holiday enter a date of 00:00. The date entered must be after the programmed start date.

Holiday Menu	Schedule	*0–Max Schedules*

A holiday can be programmed for a schedule number. If the schedule number is 0 then the holiday period applies to all schedules. If a specific schedule number is programmed then the holiday only applies to that schedule.

Edit Mode	System	Code-20

System Menu

01=Co.Name
02=Contract
03=Service Num
05=Sys.Options
06=Area
07=Reset
08=Sounder
09=Battery Test
10=Panel IP
11=Gateway IP
12=Subnet Mask
13=XIB

System Menu	Co.Name	Code-01

The programmed company name will appear on the bottom line of a keypad if there is no user logged on. The company name can be up to 16 characters long.

System Menu	Contract	Code-02

The panel can be programmed with a customer contract number of up to 8 digits. The contract number will be displayed if a user presses the **?** button while the main menu is displayed, then presses 2 on a keypad. It is also displayed to the user if an engineer reset is required.

System Menu	Service Num	Code-03

The panel can be programmed with a service telephone number of up to 16 digits. The service telephone number will be displayed to the user when an engineer or managed reset is required.

System Menu	Sys.Options	*Code-05*

System Options	Options
System	
Man. Isolate-Off	*On/Off*
Byp Limit-3	*0-255 (except PX250HS)*
Man.Temp Byp-Off	*On/Off*
AutoTemp Byp-Off	*On/Off*
Mult.Alarm-3	*0-9*
Force Set-On	*On/Off*
P/Cnt Period-001	*1-255 seconds*
Pulse Count-0	*0-10*
Debounce-001	*1-250 (2-500mS)*
Log/Set-Off	*On/Off*
Log Eng-On	*On/Off*
Log Areas-Off	*On/Off*
Exit Time-030	*0-255 seconds*
P/Set Entry –030	*0-255 seconds*
Auto Sum/Win-Off	*On/Off*
Code Attempts-10	*0-99*
Duress+1-Off	*On/Off*
Duress-1-Off	*On/Off*
Set/230vFail-Off	*On/Off*
TampResp-0	*0-max responses*
FaultResp-Off	*On/Off*
PA Resp-0	*0-max responses*
EOL-A(8k2) T(8k2)	*EOL non-Conc inputs help menu*
Alm/Tam %-030	*30-100%*
Force Test-Off	*On/Off*
Cct Check-007	*1-255*
Edit Sched.-Off	*On/Off*
Cct Double-Off	*On/Off (RX16i/QX32i)*
Easy Set-0	*0-2*
Card-Guardall	*Card type help menu*
Access ID-0	*1-4 digits*
Log TX-Off	*On/Off*
Master Edit-On	*On/Off*
UPPER CASE-Off	*On/Off*
Ready/Door-Off	*On/Off*
Late Limit-000	*0-255 minutes (PX250HS)*

System Options	Man.Isolate	*On/Off*

If the manger isolate option is on then any user with manager authority will be allowed to isolate circuits.

System Options	Byp Limit	*0-255*

This is a PX250HS only option. The bypass limit is the maximum number of circuits in the system that can be bypassed at any one time. The bypass limit does not apply to shunted circuits, circuits which are temporarily bypassed or isolated circuits. If the limit is reached a warning will be displayed and a message logged.

System Options	Man.Temp Byp	*On/Off*

This option only applies when a user starts setting from a keypad, a key type circuit or when using the easy set option. If a circuit that is programmed for bypass is active at the **end of the exit time**, and the manual Temporary bypass option is on, then it will be bypassed until it clears.

System Options	Auto Temp Byp	*On/Off*

This option only applies when a setting with a schedule.If a circuit that is programmed for bypass is active at the **end of the exit time**, and the auto Temporary Bypass option is on, then it will be bypassed until it clears.

System Options	Mult.Alarm	*0-9*

When an alarm circuit with a set only response alarms, it is latched and cannot cause another alarm until the latch is cleared. If auto reset is configured then the panel will attempt to reset the circuit and clear the latch at the end of the sounder duration. If auto reset is off then the circuit remains latched until manually reset. If the latch is cleared then the circuit can alarm again. This process will continue until the programmed multiple alarm limit is reached. Each individual circuit can alarm up to the programmed multiple alarm limit count. **A circuit alarm during the setting process is added to the circuit alarm count.** The programming range is 0-9. Program 0 to turn off this feature. Circuits, which have reached the programmed Alarm Limit, will be recorded in the event log as a "**Mult. Alarm**". Further circuit alarms are ignored until the circuit multiple alarm counter is reset. When a multiple alarm is present the user is warned when logging on. The circuit multiple alarm counter will only be reset when a user logs on, or if GSR remotely resets the panel.

System Options	Force Set	*On/Off*

The panel can be configured to allow the user to Force Set if there are circuits in alarm when setting.

System Options	P/Cnt Period	*1-255 seconds*

The pulse count period can be programmed for circuits that are directly connected to inertia devices. If another pulse is not detected within this period then the pulse counter is reset.

System Options	Pulse Count	*0-10*

If the pulse count is non-zero, then pulses of less than the alarm response time, from circuits enabled for pulse count, will be counted. If the programmed pulse count is reached within the programmed pulse count period then a change of state will be recognised. This option is only used when circuits have the inertia option enabled.

System Options	Debounce	*1-250 (2-500mS)*

The debounce time can be programmed in the range 2-500mS. The actual debounce time will be twice the number entered in mS. For example if the required debounce time is 10mS, the programmed debounce value should be 5. Only circuits configured as inertia sensors use this option. The minimum response time of a circuit is dependent on the input.

Input	Response (mS)	Default (mS)
PX Panel inputs 1-10	200	Fixed
QX inputs 1-3	2 or 500	200
QX inputs 4-10	10 or 500	200
Concentrator inputs 1-4	2-500	200
Concentrator inputs 5-8	10-500	200
Keypads inputs 1-2	2-500	200
ACM RTE & door contact	200	Fixed

System Options	Log/Set	*On/Off*

Normally the event log is not accessible when any area is set. If the Log/Set option is on then the event log can be accessed while an area is still set.

System Options	Log Eng	*On/Off*

Normally a user code must be entered before an engineer can log onto the system. If the system Log Eng option is off then an engineer can log on without being authorised by a user.

System Options	Log Areas	*On/Off*

Normally when logging an event for all areas the event will only be logged in the system log. If the Log Areas option is on then the event will be stored in each individual area log. This option only applies to logging set, unset and reset and will affect communications in point ID, SIA and Guardall formats

System Options	Exit Time	*0-255 seconds*

The panel can be programmed with a common exit time. The common exit time is used when setting:

- a common area (in any sub-system)
- auto setting by a schedule
- auto setting after a power fail
- setting from an ACM
- a user selects Force Set

System Options	P/Set Entry	*0-255 seconds*

The panel can be programmed with a part set entry time. The part set entry time is used when unsetting with an alarm circuit programmed for P/Set Entry.

System Options	Auto Sum/Win	*On/Off*

If this option is on then the clock will be automatically advanced 1 hour at 2 a.m. on the last Sunday in March and retarded 1 hour at 2 a.m. on the last Sunday in October in each year. These dates can be changed by the engineer.

System Options	Code Attempts	*0-99*

The panel can be programmed for a number of code attempts in the range 1-99 before the keypad is disabled. A disabled keypad is indicated by the “Out of Service” message.

Out of Service	*This message will remain on display for 5 minutes **from the last key press.***

System Options	Duress +/-1	*On/Off*

The panel can be programmed to generate a duress if the first digit of a user PIN code is incremented (Duress+1) or decremented (Duress-1). If no user duress option is required then program both options off. **This option should not be turned on after a user(s) has changed PIN code from the default as all possible duress PIN codes are checked when a user chooses a new PIN code.**

System Options	Set/230vFail	*On/Off*

The panel can be programmed to set with a mains fault present. If disabled the system will report “Cannot Set” when a user tries to set with a 230v fault present.

System Options	TampResp	*0-max responses*

If this option is non-zero, the programmed response number will be used in place of the default tamper response.

System Options	FaultResp	*On/Off*

XiB faults when unset will normally be indicated as a tamper alarm. If the FaultResp option is on the XiB faults are logged as a fault only and will trigger any programmed fault output.

System Options	PA Resp	*0-max responses*

If this option is non-zero, the programmed response number will be used in place of the default silent PA response.

System Options	EOL	*EOL Resistance help menu*

The Alarm and Tamper EOL values for non Conc inputs (such as Keypads) can be programmed. This feature allows the system to interface to existing sensors that do not use the preferred Guardall EOL value. Conc Alarm and Tamper EOL Values are also programmable in the 'Concentrator' menu. Please refer to the installation manual, for details of the EOL wiring arrangement.

EOL Help Options	EOL Values
1=A(8k2)T(8k2)	*Type 1 Network (Standard PX)*
2=A(2k7)T(8k2)	*Type 1 Network*
3=A(1k0)T(1k0)	*Type 2 Network*
4=A(4k7)T(2k2)	*Type 2 Network*
5=A(4k7)T(4k7)	*Type 2 Network*
6=A(3k9)T(8k2)	*Type 1 Network*
7=A(2k2)T(2k2)	*Type 2 Network*
8=A(5k6)T(5k6)	*Type 2 Network*
9=A(10k)T(10k)	*Type 1 Network*
10=A(3k3)T(3k3)	*Type 2 Network*
11=A(6k8) T(4k7)	*Type 2 Network*

System Options	Alm/Tam %	*30-100%*

The alarm/tamper detection threshold can be programmed. The value programmed is entered as a percentage of the programmed EOL value. If the measured EOL resistance of an input changes by more than the programmed alm/tam percentage then an alarm/tamper response will be given.

System Options	Force Test	*On/Off*

If the force set option is on then, when a user tries to set with a circuit set fail present, the user must walk test the area(s) the contains that circuit prior to setting.

System Options	Cct Check	*1-255*

Circuits programmed with the auto check option are monitored over the programmed number of circuit check unset periods. The end of an unset period is defined as any area(s) being unset when the system was set. If a circuit fails an auto check during this period then the area(s) cannot be set. Circuit check failures and circuit check OK (all circuits operating correctly) are both logged.

System Options	Edit Sched.	*On/Off*

If this option is on then an authorised user can change the schedule times and holidays. In a PX250HS , this option does not apply to the HS schedule.

System Options	Cct Double (RX16i/QX32i)	*On/Off*

Reference "Fault EOL" for wiring diagram. The Primary circuit is the Alarm, the doubled circuit is the Aux. If Cct Double option is on then:

1. The aux inputs for the panel circuits 1-8 will become the alarm inputs for circuits 9-16 respectively. Circuits 9-16 can be programmed with any response.
2. The programmable circuit limit will be changed to 16 circuits.
3. All non-panel inputs are unavailable.

For example in check mode circuit 1/9 appears as:

Cct-1 Clear **4.100K**	*Both circuits clear*
Cct-9 Clear **4.100K**	*Both circuits clear*
Cct-1 Alarm **8.200K**	*Primary circuit open*
Cct-9 Clear **8.200K**	*Primary circuit open*
Cct-1 Clear **12.300K**	*Secondary circuit open*
Cct-9 Alarm **12.300K**	*Secondary circuit open*
Cct-1 Alarm **16.400K**	*Both circuits open*
Cct-9 Alarm **16.400K**	*Both circuits open*
Cct-1 Tamper **>20K**	*Open circuit*
Cct-9 Clear **>20K**	*Open circuit*

System Options	Easy Set	*0-2*

If easy set is programmed the PIN code entry does not require to be confirmed with the ✔ button.
The PIN attempt range has also been changed from 1-99 to 0-99. If easy set is programmed and the PIN attempts is programmed as 0, then PIN wrap around is allowed. If Easy set is programmed as 0 the panel returns to normal PIN entry mode and confirm (✓) will be required.

Sys. Options **Easy Set-0**	*0-2, 0 is off*

Easy Set Options	Easy Set 1

In this mode when a user logs on (and the user is programmed with the log on set option) the panel will start to part set. Part set is defined as group 1, which should be programmed with a suitable exit time. During the exit time if a final exit circuit in set group 1 closes the system will full set. If the user does not want to set then pressing the ✘ key during the setting time will cancel setting and leave the user logged on.

Easy Set Options	Easy Set 2	

This mode does not require a PIN code to set and is therefore only recommended for residential applications. In this mode a user can set any set group in the system by entering the set group number and pressing the ✔ key. The programmed set group exit time will be used when setting. The system can be set by entering 0 + ✔. The common exit time will be used when setting the system. It is only possible to use the Easy Set 2 option on the first 8 set groups, as this feature expects a single digit to be entered before pressing ✔.

System Options	Card	*Card Type Help Menu*

A number of 3rd party reader formats are supported in the PX keypad version 2 and the access module version 2. The card option format applies to all keypads and access modules in the system. A Guardall reader may be connected to a keypad in two ways. Refer to the keypad programming section for details.

Card Type Help	Card Format
0=Guardall	56bit proprietary format
1=HID26bit	HID standard 26 bit Wiegand
2=Magstripe	ISO 3554, data encoded on track two
3=Paxton	Paxton, prox reader with clock and data output
4=VER/HID36bit	Verex
5=Basic	Guardall format compatible with version 1 keypads

System Options	Access ID	*1-4 digits*

An access ID may be programmed if the system is programmed to use cards with a common prefix. For example, if all cards start with “1234” then program the access ID as “1234”. If a card with ID “12345678” is then programmed then only the last 4 digits, “4578”, should be programmed for the user. If the access ID is 0 then all of the card digits must be programmed as the user ID. The Access ID is sometimes known as the Site or Facility code.

System Options	Log TX	*On/Off*

The communicator TX channel activity can be optionally logged. If this option is on then all changes (on and off) to the TX channels will be logged.

System Options	Master Edit	*On/Off*

This option only applies to variants that include the EN50131 module.

If the master edit option is off then a master user will not be able to edit a user name, user authority, user schedule, user expiry date, a telephone number or group text or copy a user authority.

System Options	UPPER CASE	*On/Off*

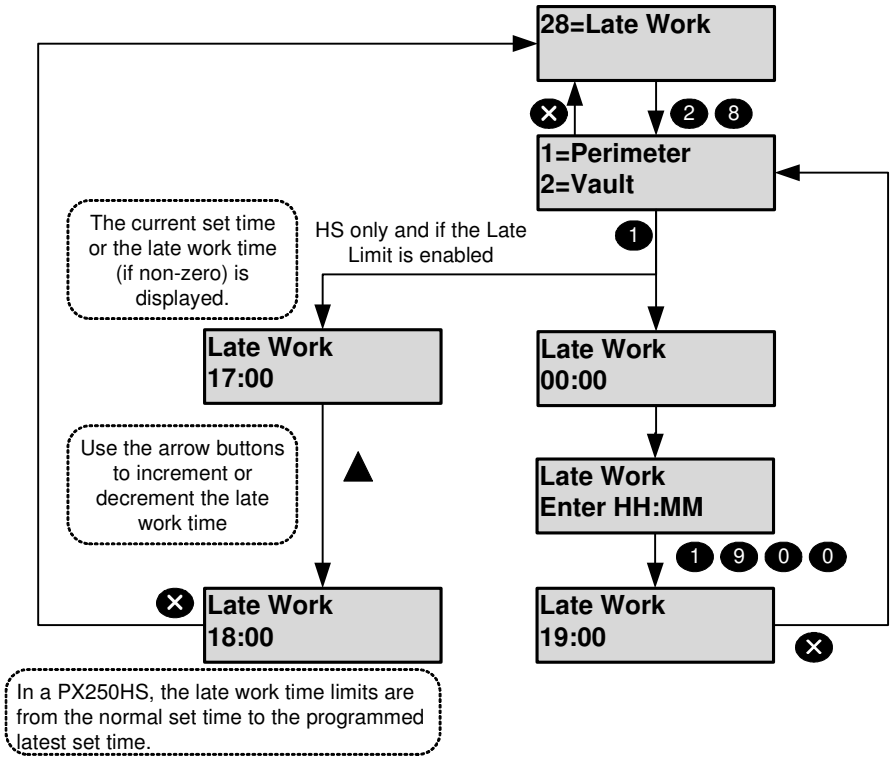
If the UPPER CASE option is on then all keypad messages will be displayed in upper case.

System Options	Ready/Door (Not RX16i)	*On/Off*

If this option is on and a door circuit in the area is open., the panel will give an exit tone warning and indicate that the area is not ready to set. If this option is off, then door circuits are excluded from the ready to set indication, and exit tone warning

System Options	Late Limit (PX250HS)	*0-255 minutes*

If a late work limit is programmed then, when a user chooses late working, the late work time can only be incremented by the programmed late limit duration. If the late limit is 0 then the user can enter a new late work time when late work is selected. In both cases the programmable “Latest Set” time may apply. For example, if the normal set time is 17:00 and the programmed late limit duration is 60, then, when a user selects late working, the set time for the current day will be changed to 18:00. Each time late work is selected the late work time will be incremented by 60 minutes up to the programmed Latest set time.


28=Late Work
2 8
1=Perimeter
2=Vault
The current set time or the late work time (if non-zero) is displayed.
HS only and if the Late Limit is enabled
1
Late Work
17:00
Late Work
00:00
Use the arrow buttons to increment or decrement the late work time
Late Work
Enter HH:MM
1 9 0 0
Late Work
18:00
Late Work
19:00
In a PX250HS, the late work time limits are from the normal set time to the programmed latest set time.

System Menu	Area (PX only)	Code-06

This option will only be available if a dialler or Serial module is fitted to the system.

Area Options	Options
Area-x	*0-max areas*
ID-0	*4 digits maximum*
Isol Limit-0	*0-255 (PX250HS Only)*
Shunt Limit-0	*0-255 (PX250HS Only)*
Byp Limit-3	*0-255 (PX250HS Only)*

Area Options	ID	0-4 digits

This option will only be available if a dialler or Serial module is fitted to the system. Individual area Ids may be programmed. Area Ids are used by the SIA, point ID, SMS and Guardall alarm reporting formats. The area 0 ID will be used for all system event alarms.

Area Options	Isol. Limit (PX250HS)	0-255

This is a PX250HS only option. The maximum number of circuits that can be isolated in an area is programmable. If the limit is reached a warning will be displayed and a message logged.

Area Options	Shunt Limit (PX250HS)	0-255

This is a PX250HS only option. The maximum number of circuits that can be shunted in an area is programmable. If the limit is reached a warning will be displayed when a user is shunting manually. If the shunt limit is reached a message will be logged.

System Options	Byp Limit (PX250HS)	0-255

The bypass limit is the maximum number of circuits in the system that can be bypassed at any one time. The bypass limit does not apply to shunted circuits, circuits which are temporarily bypassed or isolated circuits. If the limit is reached a warning will be displayed and a message logged.

System Menu	Reset	Code-07

Reset Options	Options
Reset	
Eng Rst Alm-On	*On/Off*
Eng Rst PA-Off	*On/Off*
Auto Reset-Off	*On/Off*
Strobe A.Rst-Off	*On/Off*
230v A.Rst-Off	*On/Off*
230v Fault-Off	*On/Off*
230v Warn-On	*On/Off*
230v Delay-005	*0-255 minutes*
Alarm Abort-000	*0-255 seconds*
Bank Reset-Off	*On/Off (PX250HS)*
Managed Rst-Off	*On/Off*
Reset Seed-000	*0-255*
EN Grade-2	*0-3*

Reset Menu	Engineer Reset

You can select Engineer reset to apply to Alarm, PA and Tamper type alarms. When the panel is configured for engineer reset and an engineer re-settable alarm occurs, the user will be prompted to call the engineer. The engineer prompt is:

0313332900 **Contract:123456**	*The top line will show the programmed service number.* *The bottom line will show the customer contract number.*

If managed reset is programmed then the user prompt will show the reset code.

0313332900 **Code:123456**	*The top line will show the programmed service number.* *The bottom line will show the reset code.*

The user can still reset in the normal way but is prevented from setting the affected area until an engineer has logged on to a keypad. If you have managed reset programmed the bottom line of the display will show a random reset code instead of the contact number. The engineer-reset condition can be cleared by:

- An engineer log on
- A managed reset PIN code (one shot)
- An engineer reset circuit alarm.

An engineer reset is not required if a user aborts the alarm.

If the verify eng reset programming option is on, then an engineer reset is not required if an alarm is not verified.

Reset Menu	Eng Rst Alm

If enabled, Eng Rst Alm applies to Tamper Alarms, Entry Alarms and Alarm type circuits.

Reset Menu	Eng Rst PA

If Eng Rst PA is programmed then any PA alarm when set or unset will require an engineer reset.

Reset Menu	Auto Reset	*On/Off*

Auto reset only applies to set alarms and tampers from circuits programmed with the auto reset option. If auto reset is on, the panel will automatically reset the circuit alarm latch and any programmed circuit latch output, at the end of the programmed sounder period if the circuit state is normal. If the alarm condition is not clear, the panel will attempt to reset at one-minute intervals until the alarm is reset, the area is unset or another alarm occurs in the same area. The audio output will remain on until the auto reset is successful. The strobe output may be programmed to auto reset.

Reset Menu	Strobe A.Rst	*On/Off*

The panel can be programmed to auto reset the strobe. To use this option the system auto-reset option must also be on and the verification mode must be set to off.

Reset Menu	230v A.Rst	*On/Off*

This option affects the duration of the mains fail audible response (230v Warn. On). Normally (option off) the mains response is timed for the programmed sounder duration. If the 230v auto reset option is on then a mains failure will result in an audible response, which is timed for 2 minutes.

Reset Menu	230v Fault	*On/Off*

This option affects the response to a mains failure. Normally (option off) the mains must be off for the 230v Delay programmable period (default is 5 minutes) before a mains failure is recognised by the panel. If the 230v fault option is on then a mains failure will be recognised after a delay of 30 seconds. If this option is on and the mains is off then the message “230v Failed” will be displayed on all keypads which are not in use.

Reset Menu	230v Warn	*On/Off*

The normal response for a mains fail includes an audible warning. The audible warning can be disabled. If the 230v A.Rst option is off then the fault must be cleared before further warnings are given.

Reset Menu	230v Delay	*0-255 minutes*

The delay before a mains fail is recognised is programmable. This option will be ignored if the 230v Fault option is on.

Reset Menu	Alarm Abort	*0-255 seconds*

The panel can be programmed to signal an alarm abort. If the user logs on within the programmed abort period following an engineer re-settable alarm event, an abort message will be transmitted. An alarm abort can be transmitted in Ademco, point ID, SIA, SMS and Guardall formats. Enter an abort time of 0 to disable this feature. This option requires Engineer Reset to be enabled.

Reset Menu	Bank Reset	*On/Off*

This is a PX250HS only option. If the bank reset option is on then a master, ordinary, set/unset or bank reset user may reset alarms while the system is still set.

Reset Menu	Managed Rst	*On/Off*

The managed reset option works in conjunction with engineer reset. When an engineer reset is required the panel will display a randomly generated code[3]. The user must quote this number to the Alarm Company who will give the user the corresponding reset PIN code. This should be entered like a normal PIN code and is only valid for one reset. If the panel accepts the code the message “Reset OK” will be displayed for a few seconds but the user will not be logged on. A successful managed reset will be logged in the event log.

Reset Menu	Reset Seed	*0-255*

The seed code will be used by the panel to generate a 6-digit code, which will be displayed to the user when a managed reset is required. This code must be quoted to the central station to obtain the corresponding 6 digit managed reset PIN code. The programmed managed reset seed must match the seed code used by the central station.

[3] This code is generated using the programmed managed reset seed. If you intend to use this feature the central station must be equipped with the Guardall managed reset PC package (W72951).

Reset Menu	EN Grade	*0-3*

For grades 1, 2 or 3 the following changes apply:

- All copied or deleted programming changes will be logged individually
- When alarms are being displayed to a user, a down arrow character will be displayed to indicate that there are more events to be viewed. At the end of the alarm log display an “End of Log” message will be displayed.
- The entry warning period is fixed at 30 seconds (normally 50% of the programmed entry time period)

For grade 3 only the following additional changes apply:

- A 230v fault will not be auto reset (the relevant programming option will be ignored)
- There will be no indication of a 230v fault when any part of the system is set
- There will be no indication of the set groups
- All tamper alarms can only be reset by an engineer

Note: If managed reset applies, a user is authorised to reset a tamper alarm after the managed reset code is entered.

If the programmed grade is 0 then the EN50131 features are disabled. Please also refer to the system manager edit option and the system fault response.

The battery low volts threshold is dependant on the EN Grade. If the EN Grade is 0 then the threshold is set to 11.4v. For EN grades 1, 2 or 3 the threshold is set to 12v.

System Menu	Sounder	*Code-08*

Sounder	Options
Sounder On Time-20	*0-30 minutes*
Delay-05	*0-30 minutes*
P/Set Delay-On	*On/Off*
Standby-Off	*On/Off*
Pre-Warning-Off	*On/Off*
SetFailSndr-Off	*On/Off*
System Set-Off	*On/Off*
Sounder Rpt-0	*0-10*
Bleeper-On	*On/Off*
Audio Volume-1	*1-4 (PX48i/PX80i only)*

Sounder Menu	On Time	*0-30 minutes*

The panel sounder output is always turned off at the end of the programmed sounder on time. If a time of 0 is programmed, the sounder will remain on until a user logs on.

Sounder Menu	Delay	*0-30 minutes*

The sounder delay only applies to alarm circuits and tamper when all areas are set. The panel can be programmed to delay the sounders. In this case the sounder, strobe, audio, keypad bleeper(s) will not be activated until after the delay duration. This option should only be used when the alarm event is triggering a communicator. The panel will ignore the programmed delay if there is a line fault present, the communicator makes 3 unsuccessful attempts to send an alarm report or if Home Set applies. The programmed sounder delay only applies to the main sounder output. If individual area delays or on times are required these should be programmed within the output function.

Sounder Menu	P/Set Delay	*On/Off*

The sounder delay and standby can be programmed to operate if the panel is part set (i.e. not all areas set). This option will only be displayed if the system has more than one area programmed.

Sounder Menu	Standby	*On/Off*

The sounder standby only applies to alarm circuits and tamper when all areas are set. The panel can be programmed to operate in standby mode in the event of an alarm. If standby is programmed then, following an alarm, the sounder will only be turned on if there is a line fault, or if the communicator fails to send the alarm report by the end of the programmed sounder on time. This option should only be used when the alarm event is triggering a communicator. The panel will still time the alarm for the programmed sounder duration and if a line fault occurs during this time the sounder will be turned on **for the remainder of the programmed sounder duration**. The standby option will be ignored if Home Set applies.

Sounder Menu	Pre-Warning	*On/Off*

Pre-warning will only operate if the verify alarm type is programmed as off.

If an alarm circuit is activated during the entry period then the panel stops the entry timer and gives a pre-warning alarm for a fixed period of 45 seconds. A pre-warning alarm is the normal circuit response but the communicator is not triggered. All circuits, which cause a pre-warning, are logged as " Pre-Warning". If any circuit alarms during the entry-warning period then no pre-warning is allowed.

If the user does not log on within the pre-warning timer period, the communicator will be triggered.

Sounder Menu	SetFailSndr	*On/Off*

Normally, when an area fails to set, the internal sounder and keypad bleepers will be turned on. If the Set Fail sounder option is on, the external sounder will also be turned on.

Sounder Menu	System Set	*On/Off*

The sounder can be programmed to only operate if the system (all areas) is set. This option will only be displayed if the system has more than one area programmed.

Sounder Menu	Sounder Rpt.	*0-10*

If the sounder repeat option is on and auto reset applies then, 1 minute after the end of sounder time, if a circuit is still in alarm or tamper, the sounder will be turned on. This cycle will repeat until the programmed sounder repeat limit is reached. A sounder repeat value of 1 means that the sounder will be turned on for a second cycle in the event of an auto reset fail. This option only applies to the sounder output. This option is not normally used in the UK.

Sounder Menu	Bleeper	*On/Off*

The audio output on the control panel PCB can be configured to drive a buzzer or a 16Ω speaker. To drive a speaker select the bleeper option off.

Sounder Menu	Audio Volume	*1-4*

This is a PX48i/PX80i option only. The audio volume option only applies to entry/exit, chime and test mode tones. Alarm tones are always at the highest volume.

System Menu	Battery Test	Code-09

Battery Test	Options
Battery Test Period-24	*0-24 hours, 0 = Disable*
Set-Off	*On/Off*
Unset-Off	*On/Off*
Bleeper-Off	*On/Off*
Prevent Set-Off	*On/Off*
Bat.Size(Ah)-7	*1-24*

The panel can be programmed to test the battery before setting, after unsetting or at programmed intervals. During the battery test the power supply voltage is reduced to approximately 11.2 volts and the panel is powered only from the battery. If the battery voltage is below 11.7 volts a battery test fail is logged. If an XiB auxiliary PSU is connected then it will be tested at the same time as the control panel PSU.

Battery Test	Period	0-24 hours

The battery test can be selected to operate at any interval in the range 1-24 hours, in 1-hour steps. Enter a period of 0 to disable periodic battery testing. This will not affect the normal supply monitoring.

Battery Test	Set	On/Off

The panel can be programmed to test the battery before setting. This option is independent of the timed battery test. If this option is programmed there will be a 10-second delay while the battery is tested when set is selected, during which the voltage is displayed.

Battery Test	Unset	On/Off

The panel can be programmed to test the battery after unsetting. This option is independent of the timed battery test. If this option is programmed there will be a 10-second delay while the battery is tested when unset is selected during which the voltage is displayed.

Battery Test	Bleeper	On/Off

Select this option if you require an audible indication on the keypad bleepers when the battery test fails.

Battery Test	Prevent Set	On/Off

The panel can be programmed to inhibit setting if there is a battery test fail.

Battery Test	Bat.Size(Ah)	1-24

A battery size in the range 1-24Ah may be programmed. The programmed battery size is used to calculate the available battery standby capacity.

System Menu	Panel IP	Code-10

The panel IP address must be programmed if a XiB Data Comms module is being used.

Panel IP Address	Options
Panel IP **0** **Panel Port-6000**	*Up to 16 characters including "." Characters* *Use the up arrow button to enter a "." Character.* *0-10000*

Panel IP	Panel Port	0-10000

The Panel Port Number is set to the default value of 6000. You should only modify this value if your network is already using this port number for some other special purpose. Note that the value you use must match the IP Port Number set up in GSR "Comms Options".

System Menu	Gateway IP	*Code-11*

A gateway IP address must be programmed if a XiB Data Comms module is being used on a Wide Area Network.

Gateway IP	Options
Gateway IP **0**	*Up to 16 characters including "." Characters* *Use the up arrow button to enter a "." Character.*

System Menu	Subnet Mask	*Code-12*

A subnet mask must be programmed if a XiB Data Comms module is being used on a Wide Area Network. If the panel is to communicate with an IP address that is not connected on the same sub-net then the communications will be sent via the Gateway.

Network Mask	Options
Subnet mask **0**	*Up to 16 characters including "." Characters* *Use the up arrow button to enter a "." Character.*

System Menu	XIB	*Code-13*

Baud	Options
Baud **9600**	*Choice of three options: 'Off', '9600', '19200' for each XIB bus* *If set to 'Off' the panel will not poll devices on that bus, except for devices that negotiate their own baud rate .*

Note: PX500 and PX250HS only. When using XIB Bus Detectors, obtain maximum system performance by setting baud rate to 19200. Attach all XIB Bus Detectors to this XIB bus. Maximum XIB cable length will half if baud rate is doubled to 19200. Only XIB Bus Detectors can run at 19200.

Edit Mode	Response	Code-21

The panel will use the default alarm response for all events unless a specific response is programmed.

Response	Options
Response-x	*x=Response number*
Sounder-Off	*Response help menu*
Strobe-Off	*Response help menu*
Audio-Off	*Response help menu*
Alarm Log-Off	*On/Off*
Tel Number-0	*0-max telephone numbers*

Response Menu	Sounder/Strobe/audio	Response help menu

Response Help
0=Off
1=Set
2=Unset
3=Set/Uns

Response Menu	Alarm Log	On/Off

If the alarm log option is off, the event will only be stored in the event log. The circuit set/unset options will determine when the event is logged. Note: If this option is selected as off, any circuit programmed with this response must have the Monitor option enabled. Failure to do this will result in the circuit being able to activate only once.

Response Menu	Tel Number	0-max tel. Number

If the Tel. Number is zero the normal call pattern will be used. If a Tel. Number is programmed, the normal call pattern will not be used and all calls will be to the programmed Tel. Number only.

Edit Mode	Custom User (PX250HS only)	Code-22

Up to 20 custom user profiles may be programmed. Customer user profiles should be assigned a name, which will shown in the list of user authority types (menu 6)

Custom User	Options
Custom User-x "Type 1"	*x=customer user number* *A descriptor of 10 characters max*
Set-Off	*On/Off*
Unset-Off	*On/Off*
Reset-Off	*On/Off*
Bypass-Off	*On/Off*
PIN-Off	*On/Off*
Stop com-Off	*On/Off*
Event Log-Off	*On/Off*
Time-Off	*On/Off*
Date-Off	*On/Off*
Schedule-Off	*On/Off*
Print -Off	*On/Off*
Shunt -Off	*On/Off*
Isolate-0ff	*On/Off*

Edit Mode	HS Schedule (PX250HS only)	Code-23

All times within each HS schedule must be programmed in chronological order. If an entered time is not in chronological order then an error message will be displayed. The schedule times will be checked for when the engineer exits the schedule menu.

Schedule	Options
Schedule-nn *Day*	*nn=Schedule number, Day= selected day or holiday*
Shunt On-00:00	*HH:MM*
Open 1-00:00	*HH:MM*
Close 1-00:00	*HH:MM*
Set 1-00:00	*HH:MM*
Open 2-00:00	*HH:MM*
Close 2-00:00	*HH:MM*
Set 2-00:00	*HH:MM*
Latest Set-00:00	*HH:MM*
Shunt Off 2-00:00	*HH:MM*

Schedule Menu	Shunt On	*HH:MM*

An HS schedule can be programmed to automatically shunt (bypass) all circuits in the programmed shunt group at the shunt on time.

All circuit shunt operations are recorded in the event log. All shunted circuits will remain shunted until the shunt off time unless the area is not unset during the open/close period. If the area is not unset by the programmed close 1 time the shunt will be removed.

Schedule Menu	Open 1	*HH:MM*

In an HS schedule the Open 1 time is the earliest time that all set groups programmed to use the schedule can be unset. A set group area can be set and unset without restriction between the open and close times.

If schedule unset option (Set group menu) is programmed the set group then the set group will be automatically unset at the open 1 time.

Schedule Menu	Close 1	*HH:MM*

In an HS schedule this is the latest time that all set groups programmed to use the schedule can be unset. If a set group is not unset by this time then it cannot be unset until the next day that the schedule applies.

If a set group is set after the close time then it cannot be unset until the next open time unless the unset after an alarm condition applies. A set group can be set and unset freely within the open/close period (s).

Schedule Menu	Set 1	*HH:MM*

Automatically set all set groups programmed to use the schedule at the programmed set 1 time if the programmed time is not 00:00.

Schedule Menu	Open 2	*HH:MM*

In an HS schedule this is the start of the second open/close period. It would normally be used to restrict when an area(s) can be unset following lunch time setting. If only one open/close period is required in a day then set the open 2 time to 00:00.

Schedule Menu	Close 2	*HH:MM*

In an HS schedule this is the latest time that the set group can be unset if 2 open/close periods are programmed. If only one open/close period is required in a day then set the open 2 time to 00:00.

Schedule Menu	Set 2	*HH:MM*

All set groups programmed to use the schedule at the programmed set 2 time if the programmed time is not 00:00.

Schedule Menu	Latest Set	*HH:MM*

The latest set time is the latest time that can be selected by the user for late working.

Note: The IMQ late work duration limit of 3 hours from the normal set time still applies.

Schedule Menu	Shunt Off	*HH:MM*

An HS schedule will automatically remove the shunt from all circuits in the programmed shunt group at the shunt off time. If a shunted circuit is in alarm at this time a shunt fault will be logged and the shunt fault transmitted output activated. **The circuit will also give a normal alarm response.** The circuit will also be logged as a "**Shunt Fault**" and the area **Shunt Fault TX** output will be activated.

Access Control Features

The number of ACMs that can be connected depends on the panel variant. Each ACM will control one door. The panel users must be the first users in the system. For example on the PX 500 users 2-200 may be access or panel users, users 201-1000 can only be access users. User 1 is always the engineer. The PX access control system can be configured through a security system keypad or a PC running GuardStation™ Access. Guardall PX proximity tokens may only be introduced to the system through a PX keypad with an integrated proximity reader. The ACM door input may be programmed as a circuit. This allows a door circuit to be programmed as a secure door or as an entry point for the system. There are 2 access options in the edit menu.

Edit	Options
30=ACM **31=Access Opts.**	

Access System	Security System Integration

1. The door contact may be programmed as a security panel entry/exit circuit or be given any other circuit response.
2. An access system user can be programmed as a security system user.
3. The ACM may be programmed to prevent unlocking while the ACM Group is set. The ACM Group is programmable
4. All ACM doors may be programmed to open if a fire alarm is reported from the security system.
5. The ACM group may be set and unset from a Proximity reader.
6. Outputs on the security system may be programmed to follow the state of an ACM door circuit.

Edit Mode	ACM	Code-30

Each ACM can be programmed individually.

Options	Options
ACM-nn **ACM 1**	*A 10 character descriptor, press enter to edit*
Mode-Normal	*Press ? for a list of access module modes*
SetGroup-1	*0-max set groups*
Cct-00	*0-max circuit*
Set Access-Off	*On/Off*
Set-Off	*On/Off*
Unset-Off	*On/Off*
Exit Reader-Off	*On/Off*
RTE-On	*On/Off*
Door Release-010	*000-255 seconds*
Door Open-030	*000-255 seconds*
Log Access-Off	*On/Off*
Log Denied-Off	*On/Off*
Log Open-Off	*On/Off*
Log Forced-Off	*On/Off*
Log Schedule-Off	*On/Off*
Log RTE-Off	*On/Off*
Log Card-Off	*On/Off*
Schedule-00	*0-max schedules*
Pending-Off	*On/Off*
Sch.Override-Off	*On/Off*
Aux/R Denied-Off	*On/Off*
Aux./R Time-001	*001-255 seconds, the aux. Relay activation period*
Fire/Unlock-Off	*On/Off*
Perimeter-Off	*On/Off*
Auto Set-Off	*On/Off*

ACM Menu	ACM Descriptor	10 characters

A 10-character ACM descriptor may be programmed. The ACM descriptors are used in the access log printout and user access menus.

ACM Menu	Mode	Help menu

Each access module is programmed with a mode. Please refer to the user ACM authority section for more information.

ACM Modes
0=Normal **1=Dual**
2=Escort
3=Supervisor

ACM Menu	Set Group	0-max set groups

Each ACM can be programmed in one of the security system set groups. This option determines the set group that will be set/unset when a user performs a set/unset from an ACM module. Users with set/unset authority will only be authorised to set/unset from an ACM if the user set group matches the ACM set group at the point when the user is added to the system.

ACM Menu	Cct	*0-max circuit*

The ACM door circuit may be mapped to any circuit number. The circuit can be programmed with any response. If the circuit number used is already mapped to another device then the original mapping must be deleted.

ACM Menu	Set Access	*On/Off*

If this option is off and any area in the ACM set group is set then the only users with the authority to unset the group will be allowed access. If this option is on users will not need unset authority to be allowed access, even when areas in the ACM set group are set.

ACM Menu	Set	*On/Off*

Each ACM can be programmed to allow setting of the ACM set group. To use this feature the user must have the required authority, and the user must hold the token against the reader for approximately 3 seconds. Note that setting from an ACM is not allowed if an engineer is logged on the system.

ACM Menu	Unset	*On/Off*

Each ACM can be programmed to allow unsetting of the ACM set group. To use this feature the user must have unset authority for the ACM set group.

ACM Menu	Exit Reader	*On/Off*

Each ACM can have 2 readers connected. The exit reader is optional. The exit reader bypasses any current user and/or door permission entry restrictions. A user with current Anti-Pass Back restrictions will have their timer reset for immediate re-entry after presenting their card at the exit reader and leaving through the ACM. (Refer to the ACM, Anti-Pass Back option).

ACM Menu	RTE	*On/Off*

A **R**equest **T**o **E**xit switch may be fitted to allow unrestricted exit permissions for ACM users. The RTE button can only be used if this option is on.

ACM Menu	Door Release	*0-255 seconds*

This is the time that the door unlock relay is activated for following the presentation of a valid user code. Note that the lock relay will automatically lock as soon as the door is opened. This requires door contacts to be connected to the ACM.

ACM Menu	Door Open	*0-255 seconds*

This is the maximum time that the door can be held open before a door held open alarm is generated.

ACM Menu	Log Access	*On/Off*

If this option is on then all successful door accesses will be logged. If an exit reader is used and the user access log option is on then user exits will also be logged.

ACM Menu	Log Denied	*On/Off*

If this option is on then all unsuccessful door accesses will be logged.

ACM Menu	Log Open	*On/Off*

If this option is on then all door held open alarms will be logged.

ACM Menu	Log Forced	*On/Off*

If this option is on then all door forced open alarms will be logged.

ACM Menu	Log Schedule	*On/Off*

If this option is on then all schedule changes will be logged, including Door Unlocked, Door Locked and Door Pending Unlock.

ACM Menu	Log RTE	*On/Off*

If this option is on then all RTE operations will be logged.

ACM Menu	Log Card	*On/Off*

If this option is on then the user card number will be logged when presented to the reader even if the door is not opened.

ACM Menu	Schedule	*0-max schedules*

An ACM may be programmed to use one of the programmable schedules. To disable this feature program the schedule number as 0. ACMs programmed with this option will open at the start time (see pending option below) and lock at the stop time.

ACM Menu	Pending	*On/Off*

If the ACM schedule action is programmed for Pending then the door will be unlocked following the first valid user access after the schedule start time. The door will be locked at the scheduled stop time. Proximity reader LED's will show the door as unlocked after a valid entry, for the scheduled period. If no valid token is presented before the schedule stop time the door will not be opened.

ACM Menu	Sch. Override	*On/Off*

If the schedule override option is on then a user can override the schedule by using the manual lock/unlock options on a keypad.

ACM Menu	Aux/R Denied	*On/Off*

Normally the Aux relay will be turned on when either the door is forced open or the door is held open and will be turned off after the programmed time (see below). If the Aux/R Denied option is on then the Aux relay will be turned on for programmed duration if a user is denied access.

ACM Menu	Aux/R Time	*1-255 Seconds*

The Aux. relay time can be programmed in the range 1-255 seconds.

ACM Menu	Fire/Unlock	*On/Off*

Each ACM can be programmed to unset in the event of a fire alarm. If a circuit programmed as a fire type alarms the PX will send a permanent unlock message to the all ACMs programmed with the fire/unlock option. The ACM doors will remain unlocked until the fire alarm is reset.

ACM Menu	Perimeter	*On/Off*

If a door is programmed as a perimeter door then the system will keep track of users entering and exiting through the door. This option is used in conjunction with the door Auto set option.

ACM Menu	Auto Set	*On/Off*

This option is only available if a door is programmed as perimeter. If the auto set option is on then the system will set the programmed door set group when the last user exits through the door.

Edit Mode	Access Opts.	Code-31

Options	Options
Access Opts. **A/Pass Back-000**	*00-255 Minutes*

Access Opts.	A/Pass Back	0-255 Minutes

If Anti-Pass Back is programmed, a user code can only be used once on an entry reader (reader 1) within the programmed anti pass back period unless the user code is used to swipe out. The Anti-Pass Back timer is only activated if the ACM door is actually opened and not just on the presentation of a valid token. Swipe out is programmable for each ACM (Refer to the ACM, Exit Reader option) and is a requirement for the correct operation of anti-passback.

Edit Mode	ATM (PX250HS)	Code-32

The ATM options only apply to users with ATM authority. There are 3 programmable ATM options.

ATM	Options
ATM **Delay-10**	*0-15 minutes*
Time-30	*15-60 minutes*
Ext. Time-00	*0-40 minutes*

ATM Options	Delay	0-15 minutes

The ATM delay is the time between the first and second entry of the ATM user code. If zero is programmed then the ATM user code can be entered twice without any waiting period. At the end of the programmed delay period the ATM user will be prompted to re-enter the code.

ATM Options	Time	15-60 minutes

The programmed ATM time is the maximum allowed unset time on the ATM. There will be a warning given 10 minutes before the end of the programmed unset time. At the end of the unset time the ATM user will be logged of automatically and the ATM will be set.

ATM Options	Ext. Time	0-40 minutes

An extension time may be programmed which will allow the ATM user to extend the unset time when required. Only one extension period is allowed.

Edit Mode	Dormitory (PX500/PX250HS)	Code-33

There are 2 dormitories with programmable time periods. The dormitory times only apply to alarm circuits programmed in a dormitory (Refer to the circuit options).

Dormitory	Options
Dorm 1 (Secs)-5	*1-60 seconds*
Dorm 2 (Mins)-16	*1-60 minutes*

The default dormitory time periods are 5 seconds (Dorm 1) and 16 minutes (Dorm 2). An alarm in a dormitory will disable alarms from circuits in the same area and dormitory during the dormitory 1 period. An alarm in the other dormitory during the dormitory 1 period will confirm both activations. An alarm in either dormitory during the dormitory 2 period will also confirm both activations. All dormitory activity is recorded in the event log. If a second circuit activates in the same dormitory as the first activation it is ignored even if the original alarm event is confirmed.

Edit Mode	Detector Test (PX250HS)	Code-34

The PX250HS can be programmed to test circuits programmed as detector circuits (Refer to the circuit options). The detector test can either be selected from the test mode menu or programmed to operate automatically at a time of day. The automatic detector test can be programmed not to operate if an area is set at the programmed test time. During the detector test all programmed detector test outputs will be activated. These outputs should be connected to the circuits that are programmed as detector circuits. The detector test output(s) (refer to output functions) will remain on for the programmed test period. PX250HS expects a response from all detector circuits during this time. At the end of the programmed test time there is a 10-second settling period. After this time any tested circuit which is in alarm and would give an alarm response is temporarily bypassed (until clear).

Circuits	Options
Detector Test Duration	*10-60 seconds*
Test Time-00:00	*HH:MM*
AutoTest/Set -Off	*On/Off*

Detector Test Options	Duration	10-60 Seconds

This is the test duration in seconds. The programmed duration should be sufficient to guarantee a response from the circuits that are to be tested.

Detector Test Options	Test Time	HH:MM

If you want the detector test to be automatic program an auto test time. If you do not want the automatic detector test option then enter a time of 00:00.

Detector Test Options	AutoTest/Set	On/Off

If the automatic detector test is to operate even when the panel is set the set auto test option must be programmed.

Edit Mode	Radio	Code-35

The radio menu will only be displayed if the system has at least one radio module programmed.

Radio Menu	
1=Add TX	
2=Delete TX	*This option will only be available after the first TX is added.*
3=Identify TX	*This option will only be available after the first TX is added.*
4=Options	
5=RM Text	
6=Keyfob	*This option will only be displayed if Visonic is programmed as the radio module type.*

Radio Menu	Add TX	Code-1

When the "Add TX" option is selected the system will prompt for the circuit number that the new transmitter is to be mapped to. **If an Inovonics radio system is being used you must ensure that the frequency selection link of each transmitter is in the EU position.**

Each radio repeater should be added as a transmitter.

Circuit Number __	*Enter the circuit number that the new transmitter is to be mapped to.*

If the chosen circuit number for the transmitter is already used by a hardwired circuit then the mapping for the hardwired circuit must be turned off (see input mapping).
It is recommended that the circuit numbers used for the radio transmitters are outwith the range of circuits used for hardwired circuits. This will allow additional transmitters and hardwired circuits to be added to the system at any time without re-mapping circuits.

If the entered circuit number is already mapped to a transmitter then an error message, "**TX in use**" will be displayed.

Cct xx Descriptor	
Activate TX	*The system will prompt for the new transmitter to be activated.*

To add a new transmitter, the transmitter must be activated by pressing the button(s) on a Keyfob or belt clip transmitter, or by activating the tamper switch on all other types of transmitter.

When a transmitter has been successfully added the mapped circuit number will be defaulted to an alarm type circuit with polling enabled. The keypad will then prompt for the next circuit number. If the transmitter is a Visonic fob type then polling will not be enabled.

Each transmitter has a unique ID code, which will be printed as part of the full configuration, and shown in the circuit check mode.

Radio Menu	Delete TX	Code-2

When a transmitter is deleted the transmitter ID will be deleted and the mapped circuit will be defaulted to an off type.

Radio Menu	Identify TX	*Code-3*

Activate TX	*The system will prompt for the transmitter to be activated.*

The transmitter must be activated by pressing the button(s) on a Keyfob or belt clip transmitter or by activating the tamper switch on all other types of transmitter.

Cct xx Descriptor	*The circuit 16 character descriptor*
ID1-ID2-ID3-ID4	*The unique transmitter ID number will be displayed*

When this option is in use, the normal programmed response for activated transmitters will be ignored for a period of 30 seconds.

Radio menu	Options	*Code-4*

Radio Options	Options
Options	
Type-Inovonics	*Press ? for a list of options*
Jamming-On	*On/Off*
TX Poll-On	*On/Off*
Poll Period-180	*15-255 minutes*

Radio Options	Type	*Type help list*

Two types of receiver are available.

Radio Types
1=Inovonics
2=Visonic

Radio Options	Jamming	*On/Off*

Each radio module can detect and report jamming. The panel will only log a jamming failure if this option is on. Jamming failures will be reported if the trouble alarm report category is on.

Radio Options	TX Poll	*On/Off*

Transmitter poll monitoring is enabled by default. If required polling for the system can be displayed using this option. In addition, polling monitoring of individual transmitters can be disabled. Refer to the circuit options for details.

Each transmitter will transmit a polling message approximately every 12 minutes. The panel will report a polling fail for a transmitter if no polling message has been received within the programmed poll period. Polling fails will be reported if the trouble alarm report category is on.

Radio Options	Poll Period	*15-255 Minutes*

The radio poll period is the maximum time allowed between transmitter poll messages before a poll fault is logged and optionally signaled.

Radio Menu	RM Text	*Code-5*

Each radio module can be programmed with 10-character descriptor. The radio module descriptor is used in the log messages and in SIA reporting.

Radio Menu	Keyfob	*Code-6*

This option is only available if the radio module type is Visonic. Any circuit which is mapped to a Visonic Keyfob transmitter can be programmed with any Keyfob response (see circuit programming).

Max. Keyobs					
RX16i	**QX32i**	**PX48i**	**PX80i**	**PX500**	**PX250 HS**
4	8	12	16	20	20

Keyfob	Options
Keyfob-x	*1-max keyfobs*
Away-00	*0-max set groups*
Home-00	*0-max set groups*
Unset-00	*0-max set groups*
Keypad-1	*0-max keypads*
Direct Unset-Off	*On/Off*
User-2	*2-max users*

Keyfob Options	Away	*0-max set groups*

The Away set group is the group that will be set when the away button is activated on the Keyfob. If 0 is programmed then the away button will be ignored.

Keyfob Options	Home	*0-max set groups*

The Home set group is the group that will be set when the home button is activated on the Keyfob. If 0 is programmed then the home button will be ignored.

Keyfob Options	Unset	*0-max set groups*

The Unset set group is the group that will be unset when the unset button is activated on the Keyfob. If 0 is programmed then the unset button will be ignored.

Keyfob Options	Keypad	*1-max set keypads*

The Keyfob response keypad is the keypad that will be used to display messages to the user when setting and unsetting using the Keyfob.

Keyfob Options	Direct Unset	*On/Off*

If the direct unset option is on then a user can unset by pressing the unset button. If this option is off then pressing the unset button during the entry period will unset the programmed group.

Keyfob Options	User	*2-max users*

The programmed user number will be used when logging all keyfob set/unset actions.

Edit Mode	XiB Detector	Code-36

The number of XiB Detectors that can be added to the system is dependant on the panel variant.

Max. XiB Detectors					
RX16i	QX32i	PX48i	PX80i	PX500	PX250 HS
8	16	24	40	64	64

XiB Detector Menu

0=Auto Add	
1=Add Bus Det.	*This option will only be available after the first detector is added.*
2=Edit Bus Det.	*This option will only be available after the first detector is added.*
3=Del Bus Det.	

XiB Detector Menu	Auto Add	Code-0

The Auto Add option allows the engineer to add multiple detectors at a time, without having to come back to the keypad to press option 1 to add another single detector. The system will display the current type of adding mechanism.

Auto Add	
Auto Add-Off	*Either displays Off, Increm, Decrem.*

Pressing **?** gives the three types of auto add modes available.

Auto Add Types

0=Off	*Auto adding is off.*
1=Increment	*Automatically increment the cct number after adding the detector.*
2=Decrement	*Automatically decrement the cct number after adding the detector.*

Note: The adding will start from the first circuit that the Engineer specifies (see section Add Bus Det.), then working either forwards or backwards as selected.

XiB Detector Menu	Add Bus Det.	*Code-1*

When the “Add Bus Det.” option is selected the system will prompt for the circuit number that the new detector is to be mapped to.

Circuit Number __	*Enter the circuit number that the new detector is to be mapped to.*

If the chosen circuit number for the detector is already used by a hardwired circuit then the mapping for the hardwired circuit must be turned off (see Input Mapping).

It is recommended that the circuit numbers used for the XiB Detectors are outwith the range of circuits used for hardwired circuits. This will allow additional XiB Detectors and hardwired circuits to be added to the system at any time without re-mapping circuits.

If the entered circuit number is already mapped to a detector then an error message, “**Bus Det. in use**” will be displayed.

“Auto Add” type also plays a role in adding. If set to Increment or decrement the circuit is the starting point for adding detectors. Once added the circuit number is automatically incremented / decremented and is ready for another detector to be added.

Cct xx **Tamper XIB Det.**	*The system will prompt for the new XiB Detector to be activated.*

To add a new XiB Detector, the detectors tamper button must be activated by opening up the detector and then closing the cover.

When a XiB Detector has been successfully added the mapped circuit number will be defaulted to an alarm type circuit with Fault EOL enabled. Depending on the choice in the “**Auto Add**” menu the keypad will then prompt for the next circuit number or automatically increment / decrement the detector number for addition of a new detector.

Note: The detectors Red LED will flash a sequence for 10 seconds to indicate that it has been added correctly.
Ensure that the cover remains closed after this.

XiB Detector Menu	Edit Bus Det.	*Code-2*

When the "Edit Bus Det." option is selected the system will prompt for the circuit number that the detector is mapped to.

Circuit Number __	*Enter the circuit number that the detector is mapped to.*

XiB Detector	Options
XIB Detector Cct-x	*x=circuit number*
Pulse Cnt-1 shot	*Press ? for a list of pulse count modes*
UW Day Dis-Off	*On/Off*
Anti Mask-On	*On/Off*
DET Rng Low-Off	*On/Off*
Red LED-On	*On/Off*
Yellow LED-On	*On/Off*
Green LED-On	*On/Off*
AM Sens Hi-On	*On/Off*
Fault Rpt-On	*On/Off*
Low V Rpt-On	*On/Off*
Anti Stlth-On	*On/Off*
Latching-Off	*On/Off*

The displayed XiB detector options will depend on the detector type as shown in the table.

Function	Detector Type			
	DT15 AM	DT15+	PQ15 AM	PQ15
Cct	✓	✓	✓	✓
Pulse Cnt	✓	✓	✓	✓
UW Day Dis	✓	✓		
Anti mask	✓	✓	✓	
DET Rng Low	✓	✓	✓	✓
Red LED	✓	✓	✓	✓
Yellow LED	✓	✓		
Green LED	✓	✓		
AM Sens Hi	✓	✓	✓	
Fault Rpt	✓	✓	✓	✓
Low V Rpt	✓	✓	✓	✓
Anti Stlth	✓	✓		
Latching	✓	✓	✓	✓

XiB Detector Menu	Cct	*1-max circuits*

The circuit the detector is mapped to.

Note: When you add a detector the corresponding circuit type is automatically set to alarm, with Fault EOL enabled. When changing the circuit this is not automatically done. You will have to manually modify the circuit parameters.

XiB Detector Menu	Pulse Cnt	1-4

Pulse cnt menu	Options
1=1 shot 2=2 shot 3=3 shot 4=Curt.	*The detector will alarm on the 1st detection.* *Use in harsh environments, alarm at the 2nd detection* *Use for very harsh environments, alarm at the 3rd detection* *Use to cover a narrow corridor or if used as a curtain detector*

XiB Detector Menu	UW Day Dis	On/Off

Microwave Day Disable

ON – The Microwave will be disabled while the circuit area is unset, and enabled when the area is set. This will also disable Microwave AntiMasking.

OFF – The Microwave is enabled regardless of set/unset

Microwave Day Disable is environmentally friendly as it stops microwave emissions, and reduces the detector power consumption, during the day (system unset).

XiB Detector Menu	Anti Mask	On/Off

AntiMask Enable

ON – AntiMasking is enabled

OFF – A Mask attempt will not be detected

This provides increased security as it is used to detect attempts to blind the detector by placing objects in its field of view or spraying it with paint etc. AntiMask will only operate when the system is unset (eg during the day). Also see UW Day Dis.

XiB Detector Menu	DET Rng Low	On/Off

Detector Range Low

ON – The detection range is the reduced range specified in the detector manual

OFF – The detection range is the standard range specified in the detector manual

A reduced range will improve immunity to false alarms sources when the detector is placed in a small room.

XiB Detector Menu	Red LED	On/Off

Red LED

ON – The Red LED is enabled even when not in walk test mode

OFF – Disabled

When enabled, the Red LED indicates unit alarms during the unset period .

XiB Detector Menu	Yellow LED	On/Off

Yellow LED

ON – The Yellow LED is enabled even when not in walk test mode

OFF – Disabled

When enabled, the Yellow LED indicates PIR activity during the unset period .

XiB Detector Menu	Green LED	On/Off

Green LED

ON – The Green LED is enabled even when not in walk test mode

OFF – Disabled

When enabled, the Green LED indicates Microwave activity during the unset period .

XiB Detector Menu	AM Sens Hi	*On/Off*

AntiMasking Sensitivity High
- ON – High sensitivity
- OFF – Standard sensitivity

Standard sensitivity is suitable for most applications. High sensitivity provides EN Grade 3 performance

XiB Detector Menu	Fault Rpt	*On/Off*

Fault(s) Reporting to the panel
- ON – Detector fault(s) will be reported to the panel and displayed on the Keypad
- OFF – Fault(s) are not reported to the panel but will be displayed on the LEDs

Faults reported to the panel provide the user/installer with quick information about the health of the detector. This reduces the need to visually inspect a detector for faults. Also see Low V Rpt.

XiB Detector Menu	Low V Rpt	*On/Off*

Low Volts Reporting to the panel
- ON – A Low Voltage Fault will be reported to the panel and displayed on the Keypad
- OFF – Fault not reported to the panel but will be displayed on the Red LED

This provides peace of mind for the user/installer as it will warn of a low supply voltage before the risk of false alarms.

XiB Detector Menu	Anti Stlth	*On/Off*

Anti-Stealth™ Mode Enable
- ON – Anti-Stealth™ mode is enabled
- OFF – Disabled

This is a highly intelligent feature that enhances detection capabilities.

XiB Detector Menu	Latching	*On/Off*

Alarm Latching
- ON – An alarm while the circuit area is set will be memorised by the detector and displayed on the Red LED when un-set. The memory will be cleared when next set
- OFF – Alarms will not be memorised

This feature allows the user/installer to locally identify which detector on a system caused an alarm event..

XiB Detector Menu	Del Bus Det.	*Code-3*

Note: **Ensure that a detector is deleted before physically removing the detector.**

When an XiB Detector is deleted the detector will be deleted and the mapped circuit will be defaulted to an off type.

You will be asked to enter the Cct that is mapped to the XIB Detector.

Circuit Number __	*Enter the circuit number that the detector is mapped to.*

If the selected cct is not mapped to an XIB Detector then the system will respond with message “Not Available Not Mapped”. If the cct is mapped to an XIB Detector you will be asked to confirm deletion of detector.

Cct x ✔=Confirm	*Cct mapped to detector*

Pressing the ✔ will delete the detector and delete the mapping to the circuit.

Edit Mode	Audio Module	*Code-40*

When the audio module number is entered the audio module programmable options are displayed.

Audio Module	Options
Audio Module-x	
Quiet LS-Off	*On/Off*
Int.Mic.-On	*On/Off*
Close Mic.-Off	*On/Off*
Ext.Mic. 1-Off	*On/Off*
Ext.Mic. 2-Off	*On/Off*
Ext.Mic. 3-Off	*On/Off*
Listen LED-On	*On/Off*

Audio Module	Quiet LS	*On/Off*

The default loudspeaker volume is set to high. A lower volume, quiet LS, can be programmed. All loudspeakers in the system will be active in broadcast mode.

Audio Module	Int.Mic	*On/Off*

The internal microphone is on by default but can be disabled if required.

Note: The green activity LED will still be enabled even if the internal microphone option is disabled.

Audio Module	Close Mic.	*On/Off*

The sensitivity of the internal microphone can be programmed. The default is high sensitivity (off).

Audio Module	Ext. Mic. 1-3	*On/Off*

Each of the 3 external microphone inputs can be individually enabled.

Note: The external microphone sensitivity can be individually selected as either high or low by fitting the corresponding link (MIC1-MIC3) on the audio module PCB.

Audio Module	Listen LED	*On/Off*

When the module microphone(s) are active the Listen LED (red) will normally be on. This function can be permanently disabled on each module.

Note: If a PA alarm occurs the listen LED will not be turned on irrespective of the listen LED programmed option.

Edit Mode	Video	Code-50

Video Menu
1=Video Server 2=Vid.Rec.Times 3=Vid.User ID 4=Vid.Password

Video Menu	Video Server	Code-1

Enter the video server number. The video server number is determined by the IP address which is programmed in this section.

Video Server Menu
1=IP Socket 2=Camera Mapping

Video Server	IP Socket	Code-1

The IP address and port number of each video server must be programmed.

Video Server	Options
IP Address 0	*IP Address of Video Server*
IP Port-7011	*0-10000*

Video Server	Camera Mapping	Code-2

Camera Inputs	Options
Camera Mapping Input 1-0	*0=max cameras, 0 = off*
Input 2-0	*0=max cameras, 0 = off*
Input 3-0	*0=max cameras, 0 = off*
Input 4-0	*0=max cameras, 0 = off*

The maximum number of cameras is fixed at the maximum number of video servers supported by the panel x 4.

Video Menu	Vid.Rec.Times	0-255

The video pre and post alarm times are programmable. Press help for a list of the allowed values. The video record time is only used by GSR. At the end of the video record period GSR will attempt to upload the recorded video file. The actual record time must be programmed directly into the video server. This can be done from GSR editor in the video record times page.

Video Menu	Vid.User ID	16 characters max.

The panel uses the video user ID when connecting to the video server. The default user ID is “guest”.

Video Menu	Vid. Password	*16 characters max.*

The panel uses the video user password when connecting to the video server. The default user password is “guest”. For full information on video recording refer to the Video verification manual.

Appendix A - System Alarm Responses

The system alarm responses are detailed in this section.

Event Name	Sounder	Audio	Strobe	Log Message	Output Trigger	Alarm Action	Clear Action
Alarm Circuit	Set only	set and unset	Set only	Alarm	Set and Unset	Alarm Response	
PA Circuit	None	None	None	Personal Attack	Set and Unset	PA Response	
Fire Circuit	Set and Unset	set and unset	Set only	Fire	Set and Unset	Fire Response	
Shunt Circuit	None	None	None	Alarm	None	Apply shunt	Remove shunt
Final Exit Circuit	None	None	None	None	None	Start set	Complete set
PB Circuit	None	None	None	None	None		PB set
Key Circuit	None	None	None	None	None	Attempt Set	Attempt Unset
Area Reset Circuit	None	None	None	Area Reset	None	Reset Area	
Eng.Reset Circuit	None	None	None	Engineer Reset	None	Perform Eng. Reset	
Soak Circuit	None	None	None	Soak Alarm	None	Soak Action	
Chime	None	set and unset	None	None	None		
Fire Circuit Tamper	Set and Unset	set and unset	Set only	Tamper	Set and Unset	Engineer Reset	
Panel Tamper	Set only	set and unset	Set only	Panel Tamper	Set and Unset	Engineer Reset	
Peripheral Tamper[1]	Set only	set and unset	Set only	Tamper	Set and Unset	Engineer Reset	
Circuit Tamper	Set only	set and unset	Set only	Tamper	Set and Unset	Engineer Reset	
Radio RX Jamming	Set only	set and unset	Set only	Jamming	Set and Unset	Engineer Reset	
230 volt fail	None	set and unset	None	230v Fault	Set and Unset	Mains Fail	Mains OK
Power fail	Set only	set and unset	Set only	Power Fail	Set only	Power Fail	Power fail OK
Low volts	Set only	set and unset	Set only	Battery Low	Set and Unset	Low Volts	Low Volts OK
Battery Fault	None	set and unset	None	Bat.Monitor Fail	Set and Unset		
Line fault	None	set and unset	None	Line Fault[2]	Set and Unset		
Comm fail	None	set and unset	None	Comm Fail	Set and Unset		
Authentication fail	None	set and unset	None	Rmt.Auth.Fail	Set and Unset		

[1] Any peripheral including XIB detectors.

[2] The line fault message includes a parameter which determines the type of fault:

1 - 50 volts not present
2 - Line block test failure
3 - No acknowledge from central station
4 - Main PCB LF input
5 - SmartDial Fault
6 - IP/network fault

System Alarm Responses	Supply Voltage

The panel monitors the mains supply and the battery voltage. If the mains supply fails for the programmed period then this is considered a mains fault. When a mains fault occurs then;

- The message **230v Failed** is logged in the event log. This message is logged once per hour until the mains supply is restored.
- The mains restore output is turned off.
- The mains fail output is turned on.
- All keypad mains LEDs will flash.
- The internal audio can be programmed to turn on for the programmed sounder duration.

When the mains power is restored then;

- The message **230v Restored** is logged in the event log.
- The mains restore output is turned on.
- The mains fail output is turned off.
- All keypad mains LEDs will be turned on continuously.

When the system is operating on battery power the battery voltage is continuously monitored. The following voltage levels are fixed.

Voltage (Volts)	Condition
>11.7	Battery OK
11.4	Low Volts
10.7	Power Fail
<10.6	Deep discharge

If the battery voltage falls to the low volts level then;

- The message **Battery Low** is logged in the event log.
- The low volt output is turned on.
- All keypad mains LEDs will be turned off.
- If any area is set then the external sounder, strobe and the internal audio output will be turned on for the programmed sounder duration.

If the battery voltage falls to the power fail level then;

- The message **Power Fail** is logged in the event log.
- The power fail output is turned on.
- If any area is set then the external sounder, strobe and the internal audio output will be turned on for the programmed sounder duration.
- If the system is unset then only the internal audio output will be turned on for the programmed sounder duration.

System Alarm Responses	Tamper

The panel can identify a tamper from any circuit, keypad, concentrator, access control module, output module, the external sounder and the case lid and off-the-wall tamper. All tampers are logged individually. The response for all types of tamper except a fire circuit tamper is the same. A tamper can be programmed for engineer reset when set only or when set and unset (see **Reset** menu). An engineer can **isolate** individual circuit and concentrator tampers from a keypad. An isolated circuit will have no tamper or alarm response. An isolated concentrator has no case tamper response but **all concentrator inputs will still function normally unless they have been individually isolated**. An isolated circuit or tamper remains isolated until the engineer removes the isolation or if power is removed. Some tampers can be permanently disabled by a link on the specific module. Refer to the installation manual for details. Individual circuit tampers can be disabled by fitting an EOL resistor.

System Alarm Responses	Line Fault & Comm Fail

The panel can identify a line fault from a number of different communicators. Refer to the installation manual for the location of the main PCB line fault input. The line fault condition must be present for programmed line fault enable duration before the panel gives an alarm response. Only one audible response, if programmed, is allowed in any unset period. The panel will not give a standby or delayed sounder response when a line fault is present. The panel will also log a **Comm Fail** if it fails to get an acknowledge tone from a central station. A comm fail is logged with the telephone store number. The line fault log entry specifies the type of fault.

1 - 50 volts not present
2 - Line block test failure
3 - No acknowledge from central station
4 - Main PCB LF input
5 - Dialler Fault
6 – IP/network fault

System Alarm Responses	Authentication Fail

If GuardStation™ fails to use the correct authentication code the panel will terminate the call. After 4 successive authentication failures the panel will generate an authentication alarm. No further remote log on attempts will be allowed for 4 hour period or until a user enters a PIN code on site. This feature complies with the BSIA downloading guidelines. The remote authentication alarm response is:

- the **Rmt.Auth Fail** output is activated
- the internal audio will be turned on when set or unset.
- the event is logged as a **Rmt.Auth Fail**.
- no further remote log on attempts will be allowed for 4 hour period or until a user enters a PIN code on site.

System Alarm Responses	Forced Alarm

If an ACM door is opened while the lock is closed then a forced alarm will be generated. The forced alarm action is:

1. Log the event if log forced alarm is enabled for the ACM.
2. Turn on the Aux Relay if the relay function is enabled for forced alarm.

Appendix B– User Authorities

The available user options for each authority level are shown in the table below.

Code	Menu Option	Manager	Ordinary	Set/Uns	Set	Unset	Cleaner	Access	ATM	Log	Bank Reset	Guard
01	Unset	✓	✓	✓	✗	✓	✓	✗	✓	✗	✗	✗
02	Set	✓	✓	✓	✓	✗	✓	✗	✓	✗	✗	✗
03	Reset	✓	✓	✓	✗	✗	✗	✗	✗	✗	✓	✗
04	Test	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
05	Engineer	1	1	1	1	✗	✗	✗	✗	✗	✗	✗
06	Code	✓	2	2	2	✗	✗	✗	✗	✗	✗	✗
07	User	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
08	Tel Number	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
10	Log-Full	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
11	Log-Cct	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
12	Log-User	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
13	Log-KP	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
14	Log-Date	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
15	Log-Alarm	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
16	A/Log-Full	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
17	A/Log-User	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
18	A/Log-ACM	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓
20	Time	3	3	✗	✗	✗	✗	✗	✗	✗	✗	✗
24	Holiday	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
25	Schedule	7	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
26	Group Text	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
27	Minutes Left	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗	✗
28	Late Work	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
30	Bypass	4	4	✗	✗	✗	✗	✗	✗	✗	✓	✗
32	Chime	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
33	Shunt	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗
40	Print Text	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
42	Print Hols.	5	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
50	Add A/User	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
51	Delete User	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
52	Identify User	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
53	Door Unlock	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
54	Door Lockout	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
55	ACM Text	6	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
71	Copy User	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
73	Copy A/User	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗
89	Cct Status	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗

Notes:

1 The Engineer option is not available to a user if the panel is programmed to allow the engineer to log on without user authorisation.

2 The code option for some users will only be available if configured as part of the user authority.

3 The time can only be changed by a user if programmed by the engineer.
User time changes are limited to +/- 75 minutes.

4 The bypass option is only available if at least one circuit has been programmed to allow bypass.

5 The print options are only available of a printer is connected to the system.

6 The access options are only available if an ACM is fitted to the system

7 The schedule option is only available if programmed by the engineer.

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